

"We Held a Nation-Wide Sales Conference For Only $279!"

—says Jack Emerson, Production Manager of Marlin Industrial Division

"Last month we needed to introduce a new service to 15 of our field men across the country. We wanted them to share our enthusiasm for it . . . and wanted their direct reactions. But we estimated it would cost at least $3,000 to bring them back to the home office.

"At the suggestion of a Long Distance Representative from the telephone company, President Milton Small wisely decided to hold the meeting *by phone*. And, sure enough, two 'Conference Calls' did the trick! We just gave the names and phone numbers of our men to the Operator. She did the rest — notified them all in advance . . . and then connected us by phone at the specified time.

"It was like being in the same room! We got acquainted again; we talked things over for nearly an hour and a half. So it was a good morale builder as well as a successful meeting. And we saved a lot of money holding it by phone."

That's how one New England firm solved a particular problem. And others are discovering the convenience and economy of a "Conference Call." Find out how *you* can profit from this and other special long distance services. Just call your telephone business office and ask for a Long Distance Representative. He'll be glad to help you.

* * *

MARLIN Industrial Division in New Haven, Connecticut, is known nationally for its employee bulletin board services. Thousands of these services are in use in firms that read like the "Who's Who's" of business. Marlin also supplies current news photos and personalized employee bulletins based on copy supplied by its customers.



THE SOUTHERN NEW ENGLAND TELEPHONE COMPANY

Connecticut INDUSTRY

MANUFACTURERS' ASSOCIATION OF CONNECTICUT, INC.

VOL. 34 - NO. 11 - NOVEMBER 1956

L. M. Bingham, *Editor*

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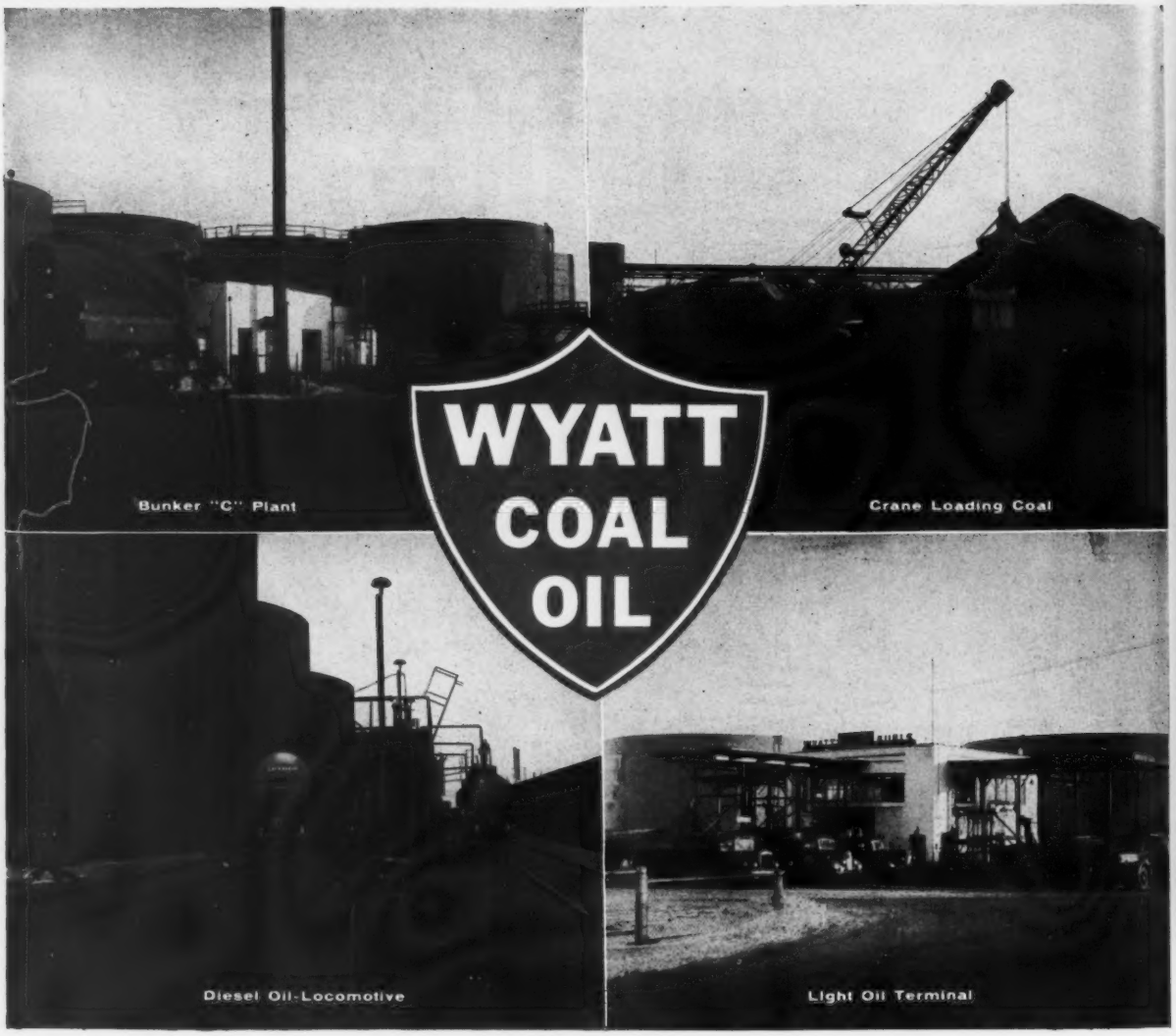
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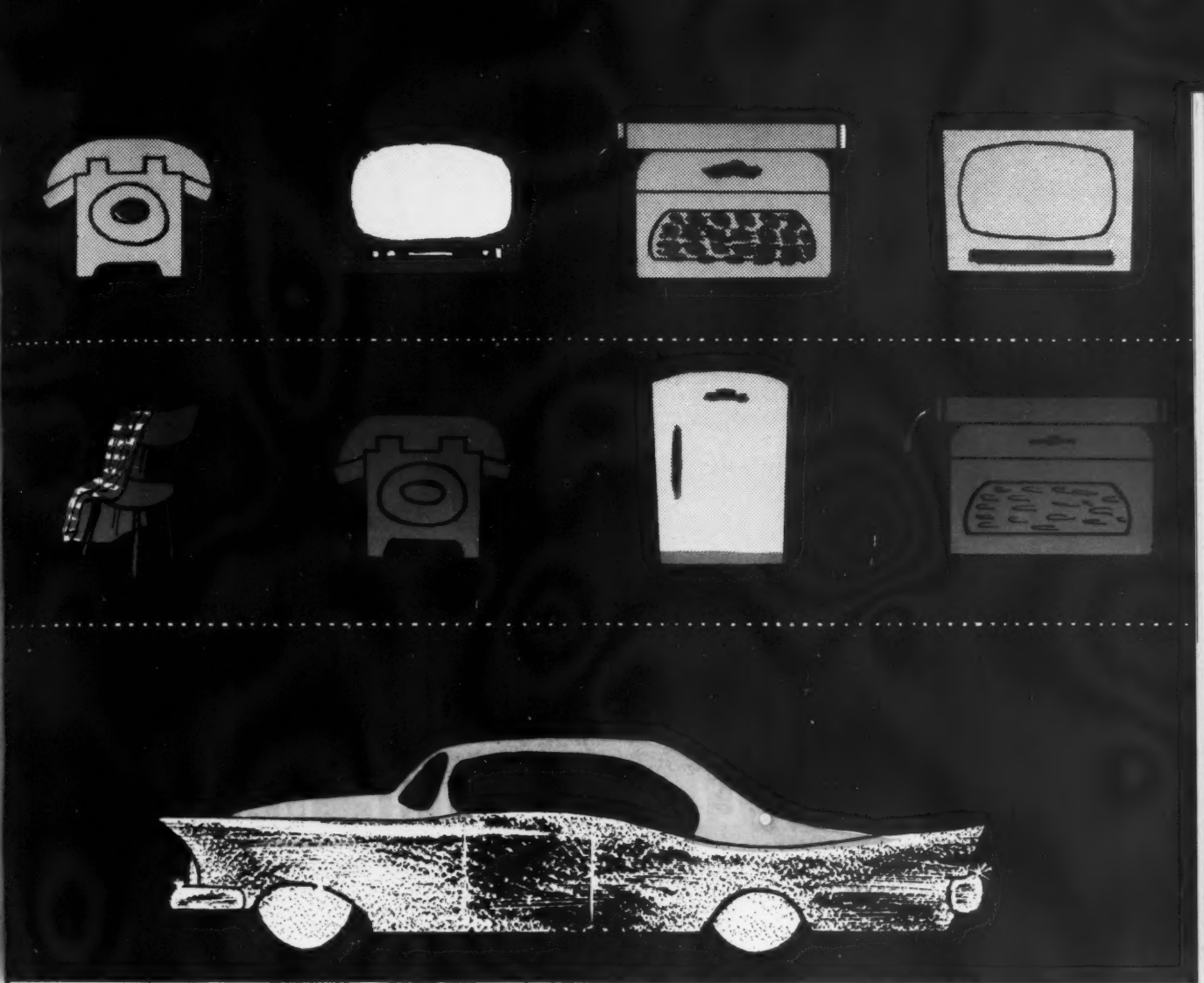
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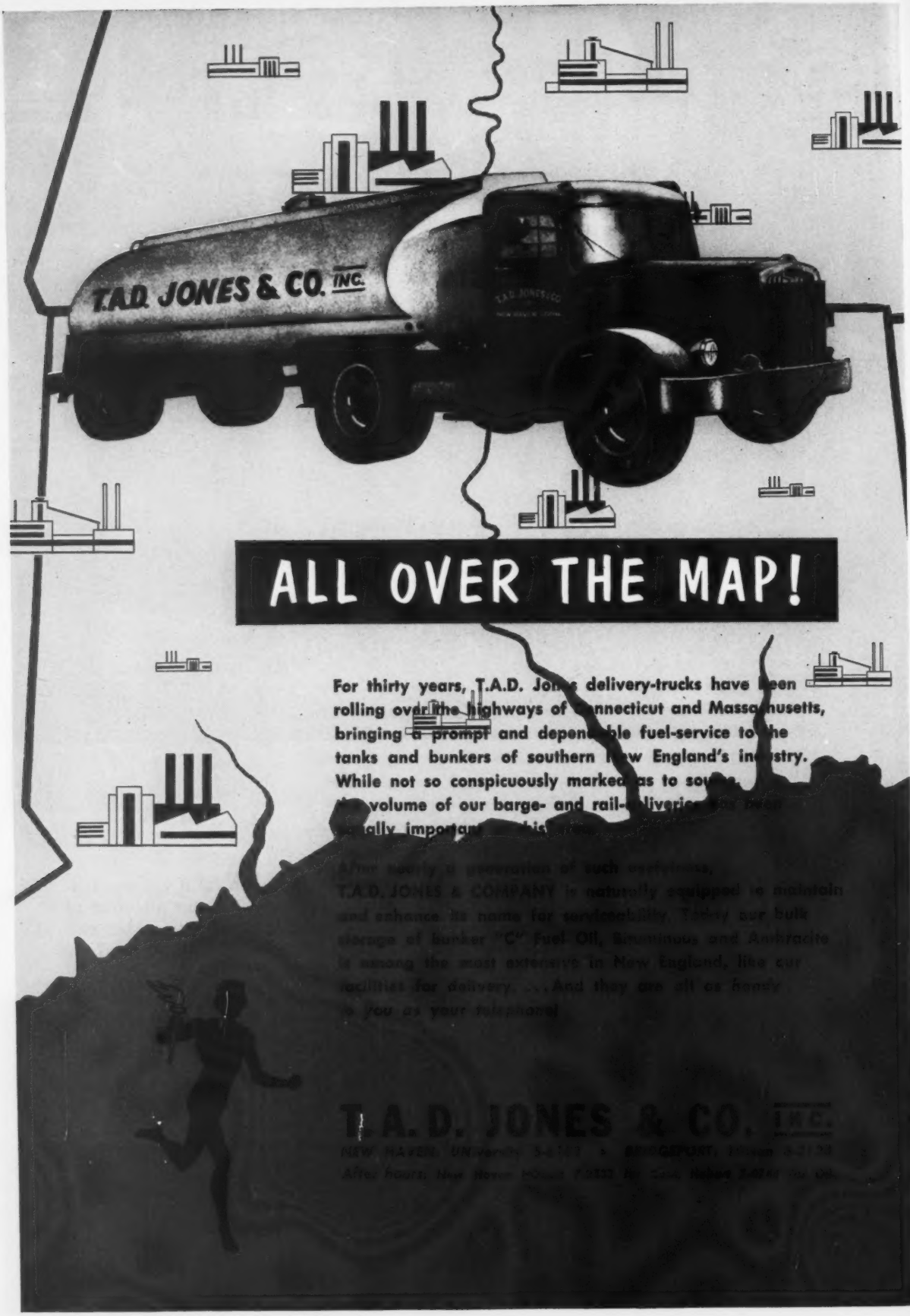
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After nearly a generation of such experience, T.A.D. JONES & COMPANY is naturally equipped to maintain and enhance its name for dependability. Today our bulk storage of bunker "C" Fuel Oil, Bituminous and Anthracite is among the most extensive in New England, like our facilities for delivery. . . . And they are all at handy to you as your telephone!
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Small Business: Survival of the Fit

By RICHARD F. MOORE,* *President*
Moore Special Tool Company, Inc., Bridgeport

SMALL Business is getting into politics these days to almost the same extent as the farm problem.

It's pretty much admitted that the farmer needs government assistance, so we won't dwell on that. On the other hand, small business as a general problem strikes me as something entirely different.

It seems to me that small business should remain on a "survival-of-the-fit" basis. I know this will sound like a harsh statement, coming especially from a small businessman. If all small business is going to be helped excessively to stay alive, I believe it will wind up as a liability to our economy.

Of course, the "climate" should be right for small business —or any business, for that matter.

Many say that it is drastic to allow some small businesses to fail and people to lose jobs, while doing little about it. So let's analyze this a bit by looking at what has happened —and is happening right now.

In 1915 or 1920 one could take a trolley car to almost any town in Connecticut from where he lived. There was a complete network all over this state which is now almost gone. This was a tremendous original investment, and it lasted only about forty years. Should we have "saved" this business? Of course not. We have much better transportation now.

There is a big watch company in New England that has been going downhill for years, even though it has had government assistance. Why should this be when another big watch company has been growing and growing in New York at the same time?

In 1850 there were hundreds of small water power-driven factories scattered along the small streams all over the New England states. Some have grown and are still there. Ninety-five per cent of them are completely gone.

To make my point clear I have taken cases that are pretty obvious, but who is going to decide these cases? The way it has been the public decides by buying or not buying the commodity. What could be a more democratic way? But it brings us right to the "survival of the fit."

They are saying big business is gobbling up small business or putting them out by unfair competition. I don't believe this is so, in general.

I know of several cases of small business being absorbed by big business, and there are three main reasons:

1. The owner at old age must raise the money to cover the taxes which will be imposed at his death.
2. The security that results from tie-in with more stable big business.
3. Unions have become too much for the owner to handle. Small business has no chance whatever with the powerful union of today.

As far as competition from big business is concerned, when small business is making the right product in the right way, small business can beat big business every time. Closeness to the job, quick decisions and flexibility for quick changeovers with lower costs in overhead give small business all the advantages it needs.

Of course much of the talk about the poor neglected small business man is "politics," but a lot of it, I suspect, also springs from a lack of knowledge of what makes our great U. S. A. tick.

One hundred years ago my grandfather ran a small farm and taught school on the side. His brother owned and operated a small water power sawmill and woodworking shop. Another brother was in politics in Hartford.

Here you have farming, education, small business and government, in simple forms, in one small family. Here you have complete understanding of a simple economy, which, I feel sure, is the reason our forefathers did such a terrific job in making our basic laws.

Today our economy is one thousand times more complicated, but basically it is the same.

Today we have educators, lawyers and politicians strongly influencing our thinking, but I often wonder, and with good reason, if they understand our 1956 economy. It is complicated, but, basically, is it different from 150 years ago? Aren't the fundamental principles the same?

So maybe we should go slow before government gets too deep into our small businesses, lest we kill off the very vitality that makes us so great and powerful both in peace and in war. Anyone who has ever undertaken to run a small business knows that there are two important rewards. The first is pride of accomplishment against odds, an intangible factor comparable to the satisfaction that comes from winning in an athletic contest. The second is the American dream of achieving success.

Remove the incentive to survive in the face of competition and small business becomes a liability. And here there is no substitute for fitness.

I know that all this is not new, but maybe it is said a little differently.

Mr. Moore, author of this month's editorial, began work as a toolmaker at an early age and at the same time took night study courses in a variety of subjects. Early in life he launched his own business with which he has been connected ever since. He was one of the founding members of the National Tool & Die Manufacturers Association and has served that organization as its first vice president, as president and still serves as a trustee. He is also a director of the Black Rock Bank and Trust Company and the author of two books, "Precision Hole Location" and "Holes, Contours and Surfaces", the first a 448 page book on tool making practices containing over 400 photographs, and the second which has just been published.

LEA of Waterbury

THE BUFFING WHEEL suggested by the Lea trademark symbolizes the buffing and polishing industry for which Lea products and methods have been developed.

IN THE Spring of 1922, a young man working in the laboratory of one of the large brass plants in Waterbury was puzzled by one of the standard practices in the plant. He noticed how messy the articles were as they came from polishing and buffing operations and how laborious a job it was to clean them prior to electroplating. They were smeared with grease and crevices and ornamentations were well-packed with compound which was hard to dislodge.

Business Born in the Kitchen

As in the case of so many other industries in this country which were started because some young man didn't like the way things were being done and decided he could develop a better method, so it was with The Lea Manufacturing Company. Bob Leather, the young man in the laboratory, did rebel. He asked: "Why can't we use a compound that isn't so greasy and messy?" Upon being told it couldn't be done—that all polishing compounds had to be well-lubricated and that grease or tallow had to be the lubricant, he said figuratively—(perhaps literally) "Nuts," quit his job and in the basement of his home on Watertown Ave., in Waterbury, began to work on his own idea—a greaseless buffing compound.

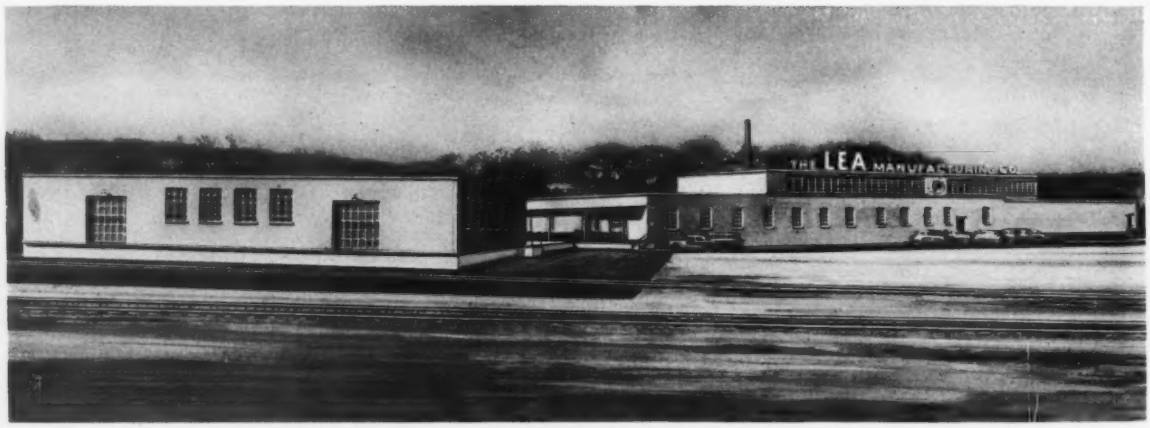
Bob Leather's original research facilities consisted of a gas plate burner, his wife's bridal-shower-gift pots and pans to mix the compound in. A cookie pan was used to form the Lea Compound into sticks—the first form of packaging used for Lea Compound. After some months of rather discouraging reasearch, Leather's idea began to jell and industry's first greaseless buffing compound was born. Such a compound was a radical departure from conventional compounds and naturally was received with considerable, almost universal, skepticism. But a few pioneering spirits tried it out and found to their amazement and to Bob Leather's quiet satisfaction that it worked. Pieces could be buffed dry and clean on flexible buffs!



ROBERT S. LEATHER
Founder



EARLE W. COUCH
President



NEW PLANT and warehouse of The Lea Manufacturing Co. in Waterbury.



PRINCIPAL manufactured product of the company is Lea Compound, shown here as it is packaged for shipment.

With one or two men to help him, and by manufacturing buffs on the side to supplement the early "hard-to-find" income, Bob Leather began to make Lea Greaseless Abrasive Compound in ever-increasing quantities. Soon he devoted his entire time to improving Lea Compound but skepticism continued to prevail in many quarters. With the jeers far outshouting the cheers. It was quite a struggle to keep going.

Over the Hump

As the business expanded additional capital was needed to keep the sheriff away from the door, so on April 9, 1923, The Lea Manufacturing Co., was incorporated, the name LEA being taken from the first three letters of Bob Leather's last name. With the additional funds raised by the sale of capital stock LEA weathered the storm. It is interesting to note that while some of those early stock purchasers may have kept their fingers crossed, they have long since uncrossed them. Once over the hump, the idea of using greaseless polishing and buffing compounds really took hold. Metal finishing plants throughout the country and many in foreign countries adopted the Lea Method as standard for much of their work. Over the years, that basic idea has actually revolutionized polishing and buffing methods throughout the metal working industry. From this one idea have come many variations in finishing methods resulting in greater economies, better finishing, or both. And from the metal field it has spread to plastics and wood.

In 1927 business had increased to such an extent the company had to seek larger quarters. These were found on Huntington Avenue but in 1930 expansion forced another move. That was the year they moved into the old Matthews & Willard building on Cherry Avenue, then owned by Scovill Mfg. Co.

Accompanying the increasing demand for compound were more and more requests for recommendations in connection with finishing methods. This necessitated increasing the research and development staff which is today an authority in the industry. From all indications The Lea Mfg. Co. is looked upon as "The Source" for finishing methods and materials.

In its development, the company did not confine production to Lea Compound alone. Another basic buffing composition was added—Learok, the buffing bar with no free grease, which is much cleaner than conventional high grease content compositions.

Recent Developments

A comparatively recent development is Lea Liquabrade—a liquid abrasive composition used primarily in bright buffing of metals and plastics. It is applied to buffing wheels with automatically controlled spray equipment. Development of this stable, non-settling and non-flammable liquid abrasive

(Continued on page 54)



AN EXPERIENCED production worker is shown performing a buffing operation on metal with a Lea composition.



THE COMPANY also produces a compound for use in cleaning eggs for the market.



CLEANEGG is used with a rotating buff, and the process may be done at the farm.



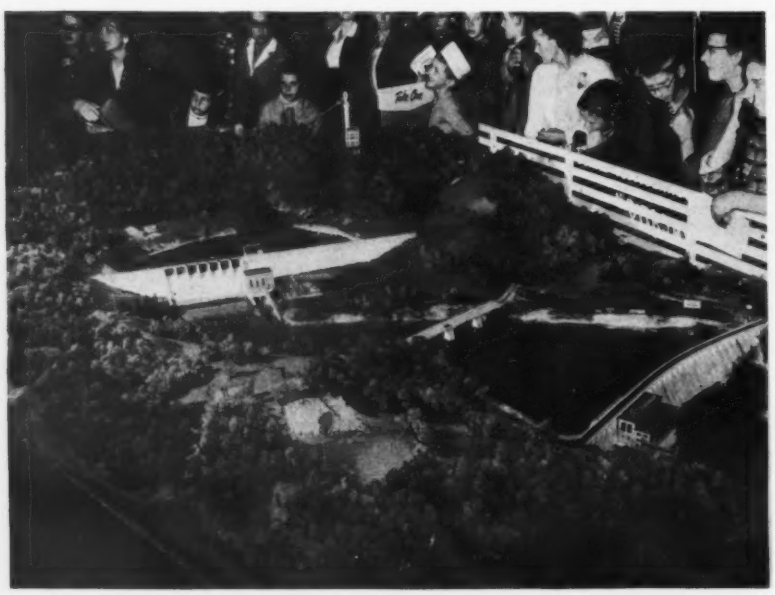
ONCE AGAIN the crowds thronged through the Connecticut Building in large numbers to view the attractive exhibits representing Connecticut industry, business and agriculture.

Bringing the HOME OFFICE to the Grass Roots

By HUGO T. SAGLIO

Connecticut Development Commission

FOUR manufacturers carried the ball for Connecticut industry in the Connecticut Building during the annual Eastern States Exposition that drew the crowds for the nine days between the 15th and the 23rd of September. When the doors closed on the big fall event on Sunday evening, 455,877 persons had passed through the gates onto the Exposition grounds in West Springfield. It is estimated that 400,000 of the total attendance had filed through the Connecticut Building, which the state's industrialists had helped to build on the Avenue of States.



THREE miniature lakes with real water and tiny waves depicted the Connecticut Light and Power Company's contribution to recreation as a by-product of increased power facilities.

Combining with the other exhibitors to accent the single theme of "Connecticut—land of gracious living and recreation", the four manufacturers, Alcort, Inc., Bridgeport Brass, High Standard Manufacturing and Stanley Works, all displayed consumer lines which fell naturally into the pattern.

At the exhibit of Bridgeport Brass, uncounted thousands of women pressed forward to admire the company's line of copper utensils, lift them, remove and replace covers, price them, and almost inevitably inquire as to where the line might be purchased. Friendly demonstrators and an excellent product line warmed old relationships and made many new friends for Bridgeport Brass.

A much smaller company, Alcort, Inc. of Waterbury, came face to face for the first time with many of its customers who had happily skimmed over the waters of New England and New York lakes in the company's swift "Sail Fish." Company representatives at the booth heard of unusual ex-



THE CHILDREN of Lieutenant-Governor and Mrs. Jewett were fascinated by the A. C. Gilbert Company American Flyer trains at the G. Fox exhibit.



AER-A-SOL BOMBS and attractive copperware drew spectator interest at the exhibit of the Bridgeport Brass Co.

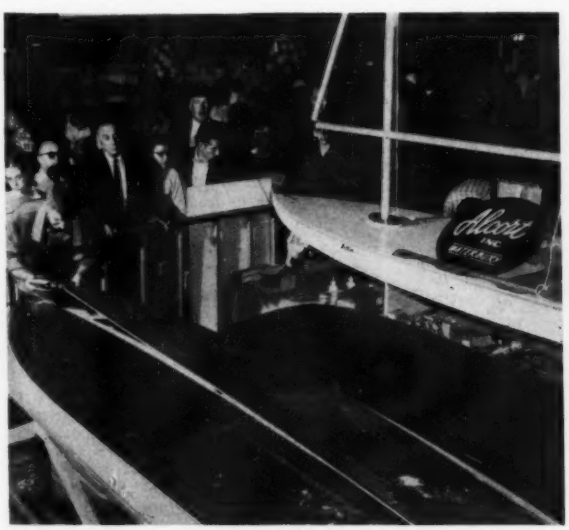
periences with the "Sail Fish," answered questions of new owners, and were happy to receive helpful suggestions from old ones.

To attract interest to its display, Alcort had arranged to assemble two of its "Sail Fish" daily from the kit that it produces. This activity not only attracted interest to the booth, as planned, but impressed so many spectators with the comparative ease of assembling the craft that many of them who had come as casual visitors were practically ready to make a down payment on a "Sail Fish" if the booth could have been set up to accept them.

High Standard, displaying its line of pistols primarily for sports use, had an experience which is not unusual in the Connecticut Building. An official of the company, meeting consumers and potential consumers face to face, was alert to the interest and comments of a whole class of rural customers the company had apparently never sought to reach. It's just possible that there may be several additions to the 1957 advertising schedule of the company.

The exhibit of the Electric Tool Division of Stanley Works was a mecca for handymen of all ages and both sexes. Within a week of the Exposition's close, the company had received enough inquiries about electrical tools "displayed in the Connecticut Building" to assure the exhibit's commercial success. More incalculable but increasingly apparent is the good will created among the hardware dealers handling the Stanley lines throughout the wide area in which Eastern States is popular. And once again company officials expressed delight with the experience

(Continued on page 56)



ASSEMBLING an Alcourt "Sailfish" from the company-made kit was an activity bound to attract those viewers who are interested in water sports.



ATTENDANTS in the booth of the Stanley Electric Tool Division of the Stanley Works answered the questions of handymen throughout the day.

OUTLOOK *For Business in Asia*

By G. M. COHOLAN, *Export Manager*

Stanley Works, New Britain

THE sale of American made goods in Asia is becoming more and more difficult due to many factors.

Dollar exchange is severely restricted in many countries such as Burma, Ceylon and India, and in addition to that, many countries have importers on exchange quotas, as well as requiring import permits for goods coming in from the U. S. A.

In other sections such as The Lebanon, Saudi Arabia and Syria, dollar exchange is plentiful and free, but the competition is such in these areas that it is almost impossible for the importers to buy from the U. S. A. because of the great difference in prices of foreign made goods.

The one bright spot in these areas is that the oil companies are insisting on American made products so that some business is available. To get such business, it is necessary to have a very reliable and very aggressive agent. In Saudi Arabia, for example, considerable buying is done through The Lebanon and Syria, although dollars are plentiful in Saudi Arabia. It is reported that many of the natives still live in tents, and in front of some of the tents stands a Cadillac.

In the larger markets such as India, Singapore and Pakistan, licenses are needed, and the competition is extremely keen. In these areas, we are now encountering competition not only from Western European countries but also from Poland, East Germany, China and Japan.

The buying in these areas seems to be done more by sensing a future market rather than by keeping records and ordering a stock to cover the average needs. It is more like trading than purchasing. For instance, an importer will decide that there will be a good market for a certain item within a few months and will purchase heavily. If it turns out that his estimate is correct, he sells at a good profit. If, however, other importers have guessed the same and have also ordered the same material, the market is oversupplied and the price falls. To move the stock, many of the importers even sell at a loss rather than carry the stock over until the market advances. There is no guess work as to what the market price will be as there are brokers who make it their business, undoubtedly for a fee, to keep everyone posted as to the selling price to the consumer of the particular item day by day.



G. M. COHOLAN

The nationalistic feeling in India and some other neighboring countries is very strong, and the governments are doing everything possible to favor any local industry. It would seem that it would be advisable for many American manufacturers to locate there, but before doing so, a thorough study should be made, not only of the market but of the government regulations under which a plant can be established.

In the whole area, American goods are still being sold, especially if the brand of those goods is well known, but the difficulty is great because of the fact that manufacturers outside of the United States have improved their products, especially as regards finish. All the countries in this section are extremely price conscious and, though they may want a higher quality item, the extremely low price of the competition seems to be the predominating factor in the sale of many goods, quality being second in consideration.

The Hong Kong market is quite different today from what it used to be before the war. To all intents and purposes, the business from China has disappeared. If the embargo is lifted, whether we shall ever get back the China market is a matter to be considered. Today China is becoming a competitor by manufacturing many items, and their prices are even lower than Japanese items of the same type. It is of interest to note that much of the Chinese made products are not branded. Therefore, as far as the Hong Kong market itself is concerned, one must rely more on the consumption of that particular market for one's business, and it is not a particularly large market. The population of Hong Kong is said to be now about 2.4 million people. It is increasing rapidly and there is a high birth rate.

There is a considerable amount of building going on in Hong Kong, and they have large projects in mind for the future. Hong Kong is a very competitive market and, at the present time, is very much overstocked. In fact, they have recently been unloading goods into adjoining countries such as Thailand and India at below landed cost prices.

You have all read recently of the restrictions against imports announced by the government of Burma. It appears that Burma has sent many hundreds of thousands of tons of rice to Russia and other Communist countries and has not as yet received anything in exchange, so a barter arrangement has been concluded. The restrictions affect not only dollar areas but also pound sterling areas. Assuming that in the next period licenses will allow dealers to buy from the pound sterling areas, some business can be secured, but it will be a small portion of what it had been for the past few years due to the fact that most purchasing must be done from the Communist areas.

In the Hong Kong, Burmese and Indian markets, barter arrangements have been made with the Iron Curtain countries, whose prices seem to be governed by whether they get an order

(Continued on page 78)

"I WAS RAILROADED"

The Story of William P. McNamara

AS TOLD TO A STAFF MEMBER OF

THE EMPLOYERS' ASSOCIATION OF CHICAGO

This is the second in a fully documented series of stories being published in Connecticut Industry telling of the lawlessness being used by labor gangsters to rob American workers of their most important birthright—freedom of choice as it relates to earning a living by lawful means.

Mr. and Mrs. Citizen:

This story might be that of any one of the thousands of workers of America in all kinds of industry who have been forced by labor union bosses into surrendering their rights as free Americans. My story concerns the right of honest, freethinking but "little" people to earn a living without being forced to pay tribute, both in freedom and money, for the right to work.

I am 41 years old, married, and have a daughter 13. I live in Gary, Indiana, a steel town which is considered a part of Greater Chicago. For 15 years I worked as a switchman and later as a yard conductor for the Baltimore and Ohio Chicago Terminal Railroad, the old Belt Line. For 13 of these years I was an active member, and at one time acting local chairman of the grievance committee, and later Vice President of Local 287 of the Brotherhood of Railway Trainmen.

I became a member of the Brotherhood of Railway Trainmen back in 1939. In those days and until 1951, membership in the union was voluntary as it should be. Our Locals were run by and for the members and freedom of expression of approval or dissent in open meetings concerning issues of common interest, was enjoyed and taken for granted. Under this system of freedom the influence and respect of the Brotherhood of Railway Trainmen and other components of the Free Labor movement grew—and so did their memberships.

By 1951 the Brotherhood of Railway Trainmen had become *big business* and the temptation of the bigwigs running the show to take over as Czars was too much for them. Take over they did, without the slightest consideration for the wishes of us members who had, as free men, made our union great. On October 1, 1951, the Brotherhood of Railway Trainmen signed a union shop agreement with the railroad which made membership in Brotherhood of Railway Trainmen a condition of employment. The object was 100 per cent compulsory membership.

I could not stand by and watch my rights as a free man taken away from me without a fight. I protested to everybody and in every way I could. I was branded a rebel and threatened with loss of my job. I was still determined not to knuckle to the terms of this union shop agreement and so, at the risk of being fired, I resigned my membership in the Brotherhood of Railway Trainmen on March 1, 1952.

The demand for my scalp came swiftly. On March 26, 1952, I was cited for violating the Brotherhood of Railway Trainmen-Baltimore and Ohio Chicago Terminal Railroad union shop agreement. On the 11th of April following, a hearing, which I requested on this charge, was held in Blue Island, Illinois, by a Baltimore and Ohio Chicago Terminal Railroad Superintendent. I heard nothing for 39 days, and then only that a decision had not been reached and when it was I would be notified.

As was to be expected from the "New Order," no consideration was given to my peace of mind or that of my family. Time dragged on and on and still, after almost 15 months of agonizing wondering and waiting, no word came as to my fate. One day, about July 1, 1953, it occurred to me that membership in the *Switchman's Union of North America,* which was approved by the Brotherhood of Railway Trainmen, would bring a quick and favorable decision to me. So I joined the Switchmen's Union of North America in which membership was voluntary. But the Brotherhood of Railway Trainmen still demanded my scalp and, knuckling to their ultimatum, the railroad finally notified me on July 16, 1953, that I had been found in violation of the union shop agreement and that I was to be fired from my job.

This was a frightening and heartbreaking spot for my family and me to be in. My life had been railroading. I was happy in my work. My membership in the Switchman's Union of North America had given me a sense of well-being and security. Now all of this was about to go down the drain. I could not and would not give up. I decided to appeal from the decision of July 16th and I did. But the earlier decision was upheld and August 28, 1953, was the date set for my discharge. I decided to try the courts.

On August 26, 1953, I obtained a court order from Federal Judge LaBuy in Chicago which restrained the railroad from discharging me. But this order was dissolved on September 27, 1954, by the court for lack of jurisdiction and a new notice of discharge was given me effective October 9, 1954. I obtained a second court order restraining the railroad from discharging me on or about the 23rd of September, 1954, in the Federal Court in Hammond, Indiana. This injunction, too, was dissolved on October 21st.

With all avenues of redress and all of my money gone I had only to wait for the axe to fall. It fell on October 21, 1954. The following day at 4:00 P.M. I was discharged.

Mr. and Mrs. Citizen, have you ever been faced with the problem of scraping up the bare necessities of life? Well, that was the problem my wife, daughter and I were faced with on that black October 22nd, 1954. My means of earning a living had been taken away from me. I knew no other trade or business than railroading but this was lost to me now and, with it, 15 years of seniority accumulated by

(Continued on page 57)



COMMITTEE REPORTS were presented at the business session in the afternoon. Shown here are L. B. Bingham, Association secretary; R. J. Starr, chairman of the Nominating Committee, Harrison Fuller, vice president, A. S. Redway, president, John Coolidge, treasurer, Herbert B. Bassett, chairman of the Budget Committee and N. W. Ford, executive vice president.

Annual Meeting Roundup

Editor's Note: For the benefit of those unable to attend this year's annual meeting conferences and to refresh the minds of those who were present, C.I. reports on the following pages some of the pertinent highlights of these conferences, largely from recordings. The Association gratefully acknowledges the important services rendered by the Dictaphone Corporation, Bridgeport; SoundScriber Corporation, New Haven and The Atwell Company, sales representative for the Gray Audograph, produced by the Gray Manufacturing Co., Hartford, for recording these conferences and for the loan of their transcription equipment. Without their indispensable services it would have been impossible to publish the following highlights of the Industrial Relations, Public Relations and Taxation Conferences.

FOR THE eighth consecutive year members of MAC and non-member guests returned to the Yale campus to listen to and participate in the Association's 141st annual meeting held in the Sterling Law Building and the Yale Dining Hall on Wednesday, September 12. Our best estimate indicates that a total of around 750 persons attended the three afternoon conferences in the Sterling Law Building and the evening session at Yale Dining Hall, with some 300 being present at one or more of the conferences, and around 706 at the evening session.

Starting at 2:30 P.M. in the auditorium of the Sterling Law Building, President Albert S. Redway called successively for the Treasurer's report and the reports of the Budget and Nominating Committees. The Treasurer's Report was given by John Coolidge, president, Connecticut Manifold Forms Co., West Hartford, who is currently completing his twelfth year as treasurer of the Association. Herbert Bassett, president, Acme Wire Co. New Haven, and chairman of the Budget Committee, gave that committee's recommendation's for the Association's 1956-57 budget. Robert Starr, President of A. M. Starr Net Co., Inc., East Hampton, and chairman of this year's Nominating Committee, reported the recommendations of his committee for five directors to serve for a four-year term beginning January 1, 1957. All three reports were approved and it was moved and voted that the secretary cast one ballot for the election of the board nominees submitted by the Nominating Committee.

The nominees elected were: Wells C. Bates, partner, C. J. Bates & Son, Chester, as director from Middlesex County, replacing Henry H. Lyman, treasurer, Lyman Gun Sight Corp., Middlefield; J. L. Schweyer, president, The National Silk Co., Inc., South Coventry, who succeeds W. L. Sorensen, treasurer, The Warren Woolen



FIVE NEW Association Directors were elected at the business session. Shown here left to right are Wells C. Bates, partner, C. J. Bates & Son, Chester; B. G. Tremaine, Jr., president, The Miller Company, Meriden; A. H. Payson, president, The American Thermos Products Co., Norwich and J. L. Schweyer, president, The National Silk Co., Inc., South Coventry. Leo J. Pantas, vice president, Yale & Towne Mfg. Co., Stamford, was not present.

Company, Stafford Springs, as a director from Tolland County; A. H. Payson, president, The American Thermos Products Co., Norwich, replacing the late Donald C. Cottrell, president, The Cottrell Co., Pawcatuck, as a director from New London County; Leo J. Pantas, vice president, The Yale & Towne Mfg. Co., Stamford, who has been serving as director representing Fairfield County, filling the unexpired term of W. L. Hubbard, former president of Norma-Hoffmann Bearings Corp., Stamford; and B. G. Tremaine, Jr., president, The Miller Company, Meriden, as director-at-large, replacing P. B. Watson, plant manager American Cyanamid Co., Wallingford.

Following the adjournment of the business session by President Redway at 2:45 P. M. three conferences on Industrial Relations, Public Relations and Taxation were held simultaneously in the auditorium and two other recitation rooms.

Evening Session

The evening session got off to its usual prompt start beginning with dinner at 6:30 P.M. in Yale Dining Hall, with some 706 persons in attendance. Reverend Sidney Lovett, Chaplain of Yale University, pronounced the invocation.

After dinner President Redway opened the meeting with the introduction of head table guests, after which he introduced Governor Abraham Ribicoff who made a strong appeal to industrialists to help keep this state at the forefront of atomic development. A digest of his talk taken from a recording appears on page 29 of this issue.

President Redway then delivered a brief address warning of the growing threat of union monopoly to industrial growth. While calling attention to his annual report of Association's activities during the past year he announced that rather than take the time to deliver it at the meeting it would be printed along with his spoken remarks in this issue of CONNECTICUT INDUSTRY. His full report appears beginning on page 30 of this issue with the Association activity section appearing under Part I and his spoken address under Part II.

As the final feature on the program, President Redway introduced Dr. Robert E. Wilson, chairman of the board, Standard Oil Co. (Indiana) who spoke on "Ethics and Principles in Modern Business." A digest of his address also appears in this issue beginning on page 34.



PRESIDENT A. S. Redway greets the featured speaker, Dr. Robert E. Wilson in the President's Room at Woolsey Hall. Left to right, Association Vice President Harrison Fuller, Mr. Redway, Governor A. A. Ribicoff, Dr. Wilson, Rev. Sidney Lovett, Yale University Chaplain, and John Coolidge, treasurer of the Association.

Industrial Relations Conference

The participants in this panel conference included Alan C. Curtiss, panel chairman, and vice president of employee relations, Scovill Mfg. Co., Waterbury; Stanley R. Cullen, works manager, Sargent and Company, New Haven; Warren L. Mottram, vice president, R. Wallace & Sons Mfg. Co., Wallingford; Joseph B. Burns, attorney, Fuller Brush Company, Hartford; and Harry B. Purcell, director of industrial relations, The Torrington Company, Torrington, all members of the Association's Industrial Relations Committee. Two other non-members of this committee who participated as speakers were John Donnelly, M. D., executive officer of the Institute of Living, Hartford and John B. Miller, employment manager, Pitney-Bowes, Inc., Stamford.

Mr. Curtiss opened the meeting with these words: "I'm glad to welcome you to this meeting which is going to consider a very important aspect of human relations. In human relations we deal with the individual and he is entitled to be treated as such. It is intrinsic in good human relations that the individual understands those actions which affect him. In dealing with the individual or groups of individuals we run into problems, and we hope that the discussion today may aid you in the solution of those problems.

Mr. Curtiss introduced as the first speaker Dr. John Donnelly, executive officer, Institute of Living, Hartford, who discussed "Psychiatric Aspects of Industry."

Psychiatric Aspects of Industry

DR. DONNELLY—According to a statement by Henry Ford, II in 1946, the Ford Motor Company was getting, in terms of direct man-hours on comparable products, 34% less output than the company had been achieving in 1941. In General Motors, a very careful study demonstrated that there was a 37% decline in 1945, compared with 1941, also in terms of man-hours and comparable processes. This later investigation attributed 43% of the decreased output to defective management, and 57% to decreased work effort.

The Opinion Research Corporation carried out a nationwide survey into attitudes of manual workers in 1945, and found that only 49% of all manual workers felt that a worker should turn out as much work as he could in the time he spent on the job. Interestingly enough, among union employees the percentage was even lower. In a comparable poll in 1951, some 51% of all workers stated that they turned out all they could in the time at work, an increase of 2% over the 5 year period—an increase which is statistically insignificant.

This decline in productivity and the presumed change in the attitudes of workers in the 1945-1946 period, compared with 1941, might be attributed

in large measure to the effects of war fatigue, tension, and a general let-down following the intensive efforts of the war years and, as such, might be accepted as a compensatory mechanism which was bound to occur. However, the later survey clearly demonstrates that other factors must be regarded as more significant.

Numerous studies by psychologists, sociologists, and industrial organizatons have repeatedly pointed to the conclusion that most problems within industry can be related to the lack of satisfaction achieved by the worker in his job. There is an increased recognition that the vast social changes which have occurred over the past four or five decades have produced effects calling for a re-evaluation of the place of the individual in the industrial setting.



THE PANEL at the Industrial Relations Conference discussed the use of psychiatry in industry. Panel members were left to right Joseph B. Burns, attorney, Fuller Brush Company, Hartford; Warren L. Mottram, vice president, R. Wallace & Sons Mfg. Co., Wallingford; Dr. John Donnelly, executive officer of the Institute of Living, Hartford; Alan C. Curtiss, panel chairman, vice president, Scovill Mfg. Co., Waterbury; John B. Miller, employment manager, Pitney-Bowes, Inc., Stamford; Stanley R. Cullen, works manager, Sargent and Company, New Haven, Harry B. Purcell, director of industrial relations, The Torrington Company, Torrington.

A man's opinion of himself, his position in society, and his attitudes toward others are tied up with his work which is one of his main pursuits in life. . . . Unless he gains from his occupation enough emotional satisfaction, he is bound to be a discontented individual. The modern industrial setting with its mass production techniques no longer provides opportunity for creative expression, nor indeed provides constructive outlets for normal aggressive drives. The worker has no feeling of accomplishment in terms of the product produced, nor does he obtain any satisfaction from the feeling of having participated in producing the final product.

In the past, the greatest value in our society has been placed on the concept of "the individual". The satisfactions which made life pleasant or desirable were supposed to be derived from his individual performance, the use of his skills, and his pride in the results of his labors. The work situation was regarded as a distinct and different part of his life, separated from the other areas of his existence; that is, from his home and his family, and from his social and community activities. Whether his friends outside his work were also his colleagues at his work was purely the concern of the man and frequently a matter of coincidence. How far we have departed from this pattern is evidenced by the situation in Hartford where firms are paying bonuses to their employees to induce their friends to change firms. This may produce short-term results but it seems quite probable that some of the eventual psychological repercussions will be detrimental not only to the firms themselves and to the employees involved, but also to sections of the community.

A much healthier evidence of progress by management has been the recognition of the findings of many psychological investigations over the past thirty years. For example, morale is greatly increased and labor turnover reduced by providing opportunities for people who work together to meet and relate in social situations. Clubs, recreational pursuits—all help the development of social groups while extracurricular competitions between teams from different companies produce further group feeling and identification. The importance of this informal group organization lies in a profound truth which is perhaps unpalatable to our ideals; namely, that a culture or a society which is content is also stable and a stable society resists change. If this premise is accepted, management has a number of decisions to make, decisions which will reflect the relative importance placed on a large number of factors.

Where human beings are concerned, there is relatively little, on the descriptive level, at best, that is new and original. Much of the talk of today about human relationships was also regarded seriously in previous generations. What has happened is that some circumstances have changed and that some knowledge was not "written down" or was not presented with a self-conscious scientific method. However, the past sixty years have seen new psychological theories propounded which do attempt to describe scientifically the motivations behind the behavior of man. Initially the type of abnormal behavior studied was relatively mild, neurotic behavior, the very type of disorder which causes so much difficulty in the modern industrial organization. The individual's personal problems were studied and emphasis was placed on the individual and his failure to adapt to the environment. The more intensive the investigations, the deeper the problem was tackled, the the more certain people became that the maladjusted individual was, to a large extent, the product of the society in which he grew up and lived. It became usual to hear the opinion that any person's characteristic personality represents his learned techniques toward solving his difficulties with other people.

The psychiatrists and psychologists learned that the origins of personality can frequently be traced to the early social environment—the family. The individual's beliefs, values, ideals, prejudices and ambitions originate in the environment. They learned that the individual's reactions to and his relationships with people in authority are best understood by knowing how he dealt with his parents and their code of values.

Increased knowledge of the influence of the family led to investigation of the social aspects of the origins of emotional problems, that is, of the factors in the person's social environment which contribute to the causes, or accentuate the symptoms, of maladjustment. Obviously, since work provides the necessities of life, since work provides the means to the realization of ambitions, and since work occupies so much of an individual's time, it was inevitably concluded that here was one area which is universally significant to all adult human beings.

It was admitted that not all jobs can be emotionally satisfying to all who do them since job satisfaction depends so much on the previous experiences of the individual and the values built up therefrom. For example, the college educated, career-orientated, housewife may find only frustration in the endless prospect of peeling potatoes and the other routine houshold tasks which become her lot when she marries. The increasing isolation from people with similar interests creates many problems in such married women with increased hostility to their lot and neurotic symptoms as a means of solving their problem.

Does this problem exist in industry? One study would appear to confirm that it does. In a study on the incidence of neurosis in factory workers, Fraser found that neurosis was probably responsible for the greatest loss of working time in industry. Moreover, the incidence of neurosis was greatest in those workers whose social contacts were restricted, while it was less than average among workers with good social contacts. Markowe and Barber, investigating the incidence of neurosis, found it to be as high as 43% in men and 55% in women employed as semi-skilled factory workers. This is unquestionably higher than in the general population and one must ask, therefore, the reason for the relationship of the work with this high incidence of neurosis.

Some of the earliest answers to such questions were unexpectedly given in the classic Hawthorne project known to all of you—unexpectedly, of course, because a beneficient management, which was experimenting with the physical conditions at the plant to produce the optimum condition for maximum production, discovered that the intangible social and interpersonal reactions of the workers were far more important in effecting increased output than the physical and material changes. The central problem in any industrial organization, big or small, is the maintenance of as high a morale level as possible, for morale is the indicator of job satisfaction. Many attempts have been made to analyze and define the factors involved. Too often high level executives place almost complete importance on economic return and on job security. The studies mentioned have shown conclusively that this is only part of the answer. One survey of manual workers showed that although most workers agreed that incentive pay plans do produce greater output (and greater pay), they preferred hourly pay. It is important for those in executive positions to realize that the personality factors which lead to the rise of a man in an organization are not at all the important motivations which are universally present in the general working population.

Indeed, it is important for management to realize that there are significant differences between the personalities of those who become executives and those who do not. As a corollary, if an executive projects onto those under him his ideals, values, and ambitions and expects these workers to perform as well and in kind as he does, then inevitably emotional problems will become more numerous, morale will suffer, and the executive himself will find his own emotional difficulties enhanced.

The susceptibility of executives to psychosomatic disorders and to early death, as from coronary disease, is well recognized. Western society is one which has largely forsaken the fine arts and gracious living as desirable ends; the goals are now action and production. Sometimes the level of aspiration is imposed from without; that is, by those higher up in the organization. Sometimes it is imposed from within the individual—more frequently it is a combination of both. And achievement is so dependent on securing the willing cooperation of many other persons. The emotional security of the executive becomes dependent on the ability to deal with the emotional needs of those under him. Correct handling by the executive may mean success; faulty methods almost inevitably result in failure not only from the viewpoint of occupation but also from that of physical and mental health. Coronary thrombosis was once called "the doctors' disease," an allusion to the fact that physicians are accustomed to driving themselves or are driven by the needs of their patients. Today it is more accurately named the disease of the executive in industry.

If so far emphasis has been placed on the environment of the job as related to emotional health in industry, attention should also be paid to the importance of the impact upon the work situation of emotional problems arising in the home and in the social environment. The individual who is disturbed in his home situation takes his difficulties with him wherever he goes and frequently he is able to gain some relief by acting out in the factory in a way he cannot do at home. The cliché used to be about the man who took his troubles home at night; it is almost a cliché now about the troubles a man brings to his work. The office or workshop is a social situation in which emotional reactions are expressed directly and indirectly. Irrespective of his place in the hierarchial system, the disturbed worker inevitably influences those with whom he comes in contact. The more elevated his standing, the more disastrous and more widely disseminated will be the consequences of his disturbance.

The kinds of personality problems occurring in a labor force can be classified in many ways with a varying number of sub-divisions. The simplest division is into the serious psychiatric illnesses which of themselves are grossly disabling and the milder conditions which are legion. The actual number of seriously disturbed persons in the United States is estimated at about 1,250,000, approximately half of whom are resident in hospitals. Many of these patients are carrying out jobs which are exactly comparable to many in industry and farming. Of the other half living in the community, many seek and obtain employment, though many of the chronic unemployable belong to this category. The mere fact that a man is psychotic does not indicate that he will not or cannot be a good worker. Many persons are occupationally mitigated against on the basis of mental illness—even when the illness has been cured. The schizophrenic patient whose illness has been stabilized can frequently be fitted into a routine job and can produce most satisfactory work. On the other hand, the onset of mental illness, for example, a depressive disorder, may frequently be noticed by an alert supervisor because one of the characteristics is a slowing down in thought and in physical activity with corresponding

change in the productivity of the individual; or persistent change in outlook towards pessimism, or the appearance of hypochondriacal complaints in a person who previously had been a conscientious and pleasant worker, may be the earliest sign. In taking the history of patients who are hospitalized, one is not at all surprised to be told that the first awareness that something was wrong came from the work situation, for the supervisor or a man's colleagues are less involved than his family and they can, therefore, be more objective in their evaluation of a change in personality.

Though humanity could be served by getting such seriously ill persons into hospital or by re-establishing them occupationally after treatment, these cases nevertheless are relatively a very small number in any one industrial organization. The less seriously incapacitating group of illnesses are far more numerous and far more worrisome to a business firm. They include simple maladjustment in particular jobs, neurotic reactions to domestic and work situations, frequent absenteeism, and disturbances of morale. In this group there are also the psychosomatic illnesses such as coronary and heart disease, ulcers of the stomach, and hypertension. Also among the psychologically caused illnesses are a large bulk of the accidents which occur in industry. Much investigation into the causes of accidents has proved to the satisfaction of most the proneness to accident has a large psychological element, whether the accident is a form of revenge, a way of escape from an unpleasant situation, or an expiation for guilt.

Hostility and aggression, on the one hand and dependence and need for acceptance on the other constitute two opposing groups of strong emotions which dominate people. The environment may exacerbate or soften the first; it may gratify or deny satisfaction of the latter. Important for management—as for the worker—is the fact that while the emotional problem may originate outside the factory, it can often be expressed most easily within it—and this is true of every person in the organization.

The majority of obvious problems spring from aggressiveness in unhappy people and may show itself in insubordination, trouble-making and quarrelling, violation of rules, and in insolence and obstructiveness. The aggression may be directed towards those on the same level, to those in charge, or those in his charge. Every manager sees this behavior and recognizes it. It is clearly impossible to generalize about solutions except in words which would seem vague or so general that anyone would say that everyone knows such answers. There is one primary principle in the search for the answer. The member of management must be prepared to ask himself first whether he is at fault in provoking the situation, whether by his own attitudes he is at least contributing to the persistence of the problem, for the executive's own feelings, whether of insecurity or of hostility or of indifference—especially those unrecognized by the executive—will result in attitudes which he believes right and true but which may produce destructive attitudes in others. The pressures of modern industry do not encourage the act of self-contemplation. Discussion with a person in whom one has confidence can be helpful.

When a problem occurs in an employee who has hitherto been satisfactory, the way to understanding the emotions involved may not be too difficult. A study of recent changes in personal relationships in the shop, of possible threats to the worker's security, for example, promotion of another, alteration of working conditions so that the man's prestige, based on unofficial values, is lowered, may give the key. On gaining the man's confidence so that what is worrying him comes out may reveal a variety of conflicts outside the work situation. The opportunity to express his feelings may be sufficient to change the whole attitude. This is certainly true where feelings of hostility are involved—provided the listener does not himself feel threatened or attacked and in consequence react aggressively. The verbal expression of hostility is the best way of blowing off steam. There is an art and skill in just listening without offering advice or taking the position of a protagonist. That the supervisor has given his time and his attention to the individual contributes something which raises the person's esteem.

With labor turnover rising, there is quickly made a study of the causes for dissatisfaction. Everyone today knows that morale in a labor force revolves around a few basic factors—economic reward, prestige, both formal and informal; security of job, knowledge of what is expected in the work, praise for work well done or for special effort, interest of employers and supervisors, the promotion of group feeling and group acceptance, possibility of promotion, the opportunity to contribute one's opinion and to participate in solving current problems. For each employee emphasis will be laid on different factors and different combinations of these factors. To trace these down will put one in the direction of the solution of the employee's problem.

It must be recognized, of course, that there is a group of persons who, in spite of all efforts and measures, continue to represent a labor problem. Some of these have problems which are insoluble even with more favorable circumstances. In many, the anxieties are so much a part of their personalities that they cannot function in a competitive society.

If emphasis appears to be always on the welfare of the employee and if members of management feel that this is being overdone, it is worth their while to consider that their aim is to achieve production, and if this is one of the ways to obtain it, then consideration of the emotional problems of employees is worth the effort. It is interesting that examination of labor relations over the past fifty years (including the men in the Armed Forces) reveals that when a tight labor market exists, more attention is paid to these factors with a slackening off of interest when the market is plentiful.

Mr. Curtiss next introduced John B. Miller, employment manager, Pitney-Bowes, Inc., Stamford, who spoke on the topic of "What to do About the Problem Employee."

What To Do About the Problem Employee

MR. MILLER—The reason we do not get so far within the realm of this subject is that you see the vast area and field that the problems cover, as pointed out by Dr. Donnelly. But we have found through a series of human relations approaches that dents can be made into it, and the doctor has already given you some hints about the handling of problem employee's. I've worked with this particular subject in roundtable groups, and have found that it is important to solve problems as they arise, that it is one of the responsibilities not only of management but of the supervisor. We all know that the supervisor is responsible for morale and motivation, for the training responsibilities. We are coming to a point, with the complexity of our culture, that supervisors more and more have to do some type of counseling. Yes-

terday I announced to one of the managers that I was coming here to discuss with the group what to do about the problem employee, and his immediate retort was, "Why don't you hire a few in order that you might have the problems to handle?", meaning that everyone in the organization is clamoring for help, especially those in the accounting, financial divisions, where they want clerical workers.

If management absolutely believes in taking the humanitarian viewpoint and putting into effect every kind of communications in human relations, then the supervisor is going to reflect that attitude and do something about it. When there are courses made available he is really going to try to do something. He's going to see it as a challenge. The stage is set. Now it's up to him to do something on stage. If the supervisor is inclined to go along with the feeling that his job is to establish good relations—supervisor-worker relations—he is going to do it. But he just cannot do it by being promoted from the machine and without being given an opportunity and the tools to do the job properly.

In our management conferences we allow problem questions to be brought to the floor as they arise. Here was one question. "Why should a man in my department, with the company more than ten years, be negative and distracting? He is a good mechanic, but he certainly is distracting to others. What can I do?" By this time the group was trained well enough to interrogate, question and really give this fellow practically a third degree. They were tying it down to the basic points here, and this is what they dug up. In the first place, when the employee was hired he was immature. Each time a promotion was made his feelings became more exaggerated, he became more bitter, more hostile, and he was practically out of control when a new supervisor took over. The new supervisor asked the question, "What do I do now?" They worked with him a little more and allowed him to decide. The supervisor decided to break the barriers of communication so that there would be better understanding. He was in a position to do this because he was a new supervisor. There wasn't any actual hostility as far as the problem worker was concerned. The supervisor found this to be the truth, and hence decided to work out a scheme whereby the problem worker could show some improvement by being made to feel important, to feel equal, and to get some recognition through a scheme of performance rating and showing how he was making progress.

We sometimes lose problems, and most of us do when we have to let some one go because they are a problem. This happens because the supervisor failed to recognize the problem or sold the person off just to get rid of the problem. You know the old scheme—no one ever transfers their best employees. If anyone ever wants to give you a dog, always question a gift dog. Frustration and its effect on behavior and attitudes can be covered without having to take a college course in psychology. Once you get the insight into morale in group structure you can certainly know that your supervisors will do a better job.

Panel Discussion

MR. PURCELL—I'm interested in the reference the doctor made to the accident-prone person. I'd like to find out if there is any way that you can identify the accident-prone person before he is employed.

DR. DONNELLY—Well, there are various tests that one can give that will point out certain things. You will usually find that the history in certain kinds of maladjustment will reveal minor accidents. Basically, it is very difficult to forecast when you've just met somebody whether they are accident-prone or not, because the accident is not likely to occur at any time but is more likely to occur at specific times when a certain situation arises that stimulates an emotional reaction in the individual.

For example, a young girl, 19, was working in a job in a Connecticut hotel which was very satisfactory to her. She was very happy in that work. But her father had certain opinions and attitudes that it wasn't nice for a young girl to work there, particularly when she was asked to work late at night. So he insisted that she change her job. She applied for another job but on the way downstairs after the appointment she fell and suffered an injury, she claimed. The girl was fully investigated, and there wasn't any question about it that prior to her going to the first job she had a problem at home—her father. She went to apply for the new job not because she wanted it but because she was more or less being forced to change jobs. She did not want the job and the accident actually resolved her problem. She did not go back to work; she was invalided for 18 months to my knowledge, and the invalidism was continued by the action of the father.

This is the sort of situation in accident-proneness. Sometimes it is a matter of escaping from a situation; sometimes it is a matter of expressing revenge. Sometimes that revenge is against the company. Sometimes the revenge is actually against someone else in the work situation. Sometimes the revenge is even against somebody in the home situation. Many accidents occur because of lack of proper attention to the circumstances and what is happening at that time. When a person has an emotional problem his mind does not pay attention to the details of the immediate situation, and such people become prone to accidents. There is one study which reveals that among say 5,000 employees, about 5% have 65% of the accidents.

MR. PURCELL—If I may ask another question in that connection—I think it is an axiom of psychotherapy that the patient must want to be helped in order for the help to be meaningful. Would it help an employee to be referred to psychotherapy if he did not want to go?

DR. DONNELLY—No, I don't think it would. As a matter of fact, it is not just a question of referring him—that's a whole big problem in itself.

MR. PURCELL—How do you get an employee to go, to submit to mental care if he will not go or if his family will not make him go?

DR. DONNELLY—The therapist has to depend upon what we call tender, loving care. In other words, most people do like to be liked and they do like people to want to like them and they want people to be kind to them. Since a person who presumably needs psychotherapy has an emotional problem, one must presume that no matter what his surface reactions are, underneath he does want help. It is a question of approaching the man in the right way at the right time or through the right person. Force is out. You must persuade him.

MR. CULLEN—Dr. Donnelly mentioned the tight labor market, but it seems to me that one way to handle the problem employee is to minimize the number that you hire; and one way to minimize the number of problem employees that you add to your payroll is to try to discover the personality attributes that may result in the person becoming a problem employee.

These personality attributes frequently result in emotional difficulties

that are often expressed in real or imagined physical infirmities, and we have to consider them in industry as being hysterical or malingering. In our company we feel that we have been successful to a degree in using a psychosomatic test, which is applied before employment and on which we have developed certain standards. There are other personality attributes that have to do with the person's ability to get along with other people and to cooperate with those in authority, to avoid fault-finding, suspiciousness, and belligerency; and in measuring these attributes we have used a test authored by Guilford and Martin. This is really not a test but a questionnaire. We feel that in most instances this questionnaire has been successful in minimizing the number of people that we hire who can become problems. Perhaps Dr. Donnelly would care to comment on the use of pre-employment tests in avoiding problem employees.

MR. MILLER—We use the same test, except in a modified form, called the Guilford-Zimmerman. It is the survey rather than inventory test. It doesn't have as much depth, and we're more interested in the highlights of attitudes. If they do get a low score on such factors as agreeableness and cooperativeness, as you mention, and even a factor which can be considered emotional control—then by interviewing further and getting some idea of what the disturbance is about, we can tell whether it is an active or inactive thing.

We do not give the test for the purpose of turning down a person, but if they are going to be troublesome we do not give them to just any supervisor. We are selective, giving the man to the supervisor we believe will be able to handle him best. We have a few who have become good loyal employees despite the pattern.

MR. CULLEN—Dr. Donnelly said, in commenting on the tight labor market in Hartford, where some firms are using their best employees to recruit new employees, that there is a possibility of unfortunate psychological repercussions. I wondered why there should be.

DR. DONNELLY—I feel that the best employees are actually very perceptive. I think that anybody who has worked with employees knows that most of them actually are pretty perceptive. And this is a form of inducement which has reached the stage where one company is up against another company in this particular instance. The thing about it is that it makes the man or woman in industry realize that the reason why they are so valuable is not because they are there as individuals, but because the company just needs manpower. That was the psychological effect that I have heard.

MR. BURNS—I have been a bit overwhelmed by the technical knowledge here. There are none of us in industry who do not have problems. But I think we are in industry for probably a less high ideal than the edification of mankind, and I wonder about the cost of these programs. I don't think any of us are heartless and cruel, but we are in business primarily to make money, and if we're going to spend money for testing, for psychiatry, for additional medical help, we want to know what we're going to get for it.

I wonder if there's any program, or any contemplated program, whereby small industries could work together and utilize groups for this. And also, I wonder if there is a way we can transmit these ideas, which I frankly know and feel are worthwhile, to the line supervision and still get a measure of responsibility without it costing too many dollars?

DR. DONNELLY—How much? How many dollars? Well, there isn't any answer to this question, but there are about eight full-time industrial psychiatrists in this country, or were about a year ago. Only eight full-time men in this particular field. Not psychologists, mind you, but psychiatrists. There are many more psychologists. When the ordinary medical men and the nurse were brought into industry a great many firms wouldn't accept the idea initially. They didn't think it was worth the money. Now that it has proven itself as a money-saver most organizations have a medical service.

Apparently under certain conditions it is worth using these new psychiatric techniques, and under other conditions it isn't. It seems to me that if union contracts become such that it is more and more difficult to get rid of the problem employee, your problem employee can cost you a lot of money just because he is around. And if union contracts are going to develop on the basis that you cannot dismiss somebody without an extraordinary reason, it seems to me that this is an area whereby working in terms of the relationships of the men, you might achieve more than the value of the money you invest.

MR. MOTTRAM—The point was brought out earlier that the supervisor is responsible for the morale in production. My query is: How can we better bring our supervisors up to date on what is going on so that we can improve the morale? I assume we should spend more time with them than we should in the hiring of new employees.

MR. MILLER—The training director, if the company is large enough to have a training director, should be aware of the trends as they appear. We have all heard and had discussions about Alcoholics Anonymous and what good the A.A. does for alcoholics. You might get the alcoholic to join A.A., but the individual to improve himself must take the initiative. As new developments occur in the realm of psychology and psychiatry, from the standpoint of getting better relations, the supervisor should be trained so that he can become a better observer and basically come to know the individuals under his supervision.

DR. DONNELLY—When you're planning to keep 800 employees in a tight labor market in a particular type of occupation which cannot compete with industry in terms of pay, fringe benefits or working hours, you have quite a problem in the particular field we are talking about. In order to meet this competition you've got to provide something more than these things in terms of satisfaction. At the Institute we have reduced our labor turnover from around 75% three years ago to around 62%. Much of the success in our particular situation has been due to the application of principles that we teach in terms of people. We have meetings at which the employees are able to meet on the same level. They can express themselves. They solve joint problems. They interact by going from one department to another and talking about these joint problems. The point about it is that it is not so much what they say, or what the particular problem is, but rather the fact that they are all getting together. They all feel that they are mutually accepted through cooperating in a group. This is what really makes people feel welcome. And when you go around you talk with them, or if they have a problem they'll talk with you. It may be something quite trivial, nothing to do with work especially.

To develop this kind of work climate is the job of a psychologist or a psychiatrist in industry. He helps people on all levels to see and understand, although they may not understand the significance. Of course you realize that if you do this for a certain length of time it all becomes quite

natural, and then you do not need this intensive training.

For example, we have quite a few doctors. We work from 8 o'clock in the morning until 5:30 every day. The doctors work at night because we have to cover the hospital around the clock in rotation. We spend three months in intensive training of these doctors. They get time to know every aspect of the organization. At the end of three months these people fit into a most complex organization. They feel secure because they have been tutored. It costs money to do that, but we feel that it's worth it, and that's what industrial relations are.

MR. CURTISS—Mr. Miller, is there a danger of becoming meddling or too paternalistic?

MR. MILLER—There is a danger if the attitude of top management through the supervisor isn't sincere. There is a good possibility that employees will misunderstand or consider it meddling or paternalistic. Nevertheless, insofar as meddling is concerned, if the atmosphere is created, then the employees are inclined to trust the company and supervisory management and therefore accept what is done for them.

MR. CURTISS—A question for Dr. Donnelly. How much of personnel gets involved in trying to solve the employee's problem?

DR. DONNELLY—Difficult problems depend so much on the individual situation. I think first of all, there is never any harm done by listening and finding out and letting a person ventilate what the trouble is. There is obviously somebody in the right relationship with the worker. And when a person can sit down and ask himself what is he actually blowing off about, the supervisor or personnel man, or whoever can ask him, "Well, what is it, what are you really worried about?" And often maybe this will have to be done frequently. I think the real danger is that the person becomes a protagonist in the argument, and the member then identifies with the worker, unconsciously sometimes, and he says, "Yes, I understand." He then begins to rationalize why he must accept the worker's view, or, alternatively, the supervisor may identify with management because he feels threatened in some way by the discontent, the hostility or the aggressiveness of the employee, and he gets involved. When that happens that is dangerous because it is likely to spread to everybody. Once your feelings are aroused they have to be quieted down, which takes time, or else you get new ones.

There is another kind of very dangerous problem that arises in this field. That is that for some reason an employee's particular problem is actually the same, or arouses the same emotions that the supervisor has. For, after all, supervisors are only one stage or two stages above the employee. He has an emotional problem and it could happen that they become so emotionally involved with each other that the reality of the situation disappears and it becomes an emotional relationship pure and simple. It doesn't happen too often, but it can happen, does happen, and when to know that it is happening, of course, is important.

MR. CURTISS—Question for Mr. Miller. If the supervisor is snowed under with work how can he find time to handle the problem employee?

MR. MILLER—That's really a tough one. I think again it is the problem of management to see that the supervisor does have some allotted time and even to keep track of it, and to have a private spot to discuss problems with employees when it is necessary. Not taking care of problems during periods of high production will back up in time, and pretty soon morale and everything else is going to suffer. So it is a matter of degree in giving it the attention which it should get.

MR. BURNS—We now have doctors and hospitals in plants, and is it possible to work out a program with the facilities we now have? Can we superimpose this additional help onto the staff which we have at the present time?

DR. DONNELLY—Well, I don't know as you can impose more on a man who is already working all the time that he has available, but the doctor in this field is in a perfectly wonderful position to work in this particular area because the supervisor can often get a man to go to the doctor on some excuse or physical reason; and in the process, if the doctor is alert in this particular field, he can catch the need for psychiatric help. People will go to see such a doctor much more easily than they will go to see a psychiatrist, because the average person is afraid of a psychiatrist. They're afraid that somehow we're going to read their minds, and of course that is all nonsense, that we can tell what their secret thoughts and guilts are. Of course, that's a lot of nonsense. We cannot do that at all. They impart the psychiatrist with even more magical qualities than the average medical man. The average man feels this way just as much as does the industrialist or executive. In fact he feels it a little more so because the industrialist or executive can probably afford to go to a psychiatrist whereas the employee cannot. If you can get him to a general practitioner it would help. I once practiced general medicine, and it was a fact that so much of my work was in the field of human relations. If you can get such a doctor you've really got a fine one, and you ought to double his salary.

MR. PURCELL—Doctor, there are about 100 people in this room, and on the basis of sound statistics, what percentage of us have a mental problem?

DR. DONNELLY—We can solve that in a variety of ways. Can I show you what goes on and how you handle things in a group? You notice when the question is raised about each of you—how many of us here have problems—you all moved. And this is what I mean when I say that people are afraid; they're afraid of a psychiatrist; they're afraid of this problem of emotional ill health; and actually it is very common. There is no such thing as normality. It's much easier to say what is mental ill health or what's emotional ill health than it is to say what is maturity or normality, because there is no such thing as normality that I can define.

There is a wide range of conduct which is considered normal, and it is when your behavior begins to go outside the limitations of that field—either your relations with your wife or your children or your next door neighbor or your boss or the men under you or with you—when you get outside that, then you have a problem. On this basis you can decide that pretty well everyone has a problem, and that's nice because it doesn't isolate anyone as normal. Nobody feels slighted.

There's another way of looking at it. That is how many people need treatment at the hands of a psychiatrist. There are 700,000 people in mental hospitals, and it is estimated that there are as many people outside the hospitals who are in need of mental treatment. Now you can go further than that and survey a population. There was a survey done which took three years in a relatively small town in New York State. They surveyed the town. They practically examined everybody from birth to death, hospital records, doctors, clergymen. They went

from house to house and investigated everything. They found that if you took neurotic symptoms, psychosomatic illnesses or psychotic symptoms or difficulties of adjustment or any abnormality which was of a psychiatric nature, you come up with the astounding finding that 32% plus of people needed psychiatric help of the total population. That's a little high. There has been a more recent study in which it was suggested that the figure ought to be nearer 50%. So you can see it depends on your standards, and if we kept going at this we'd soon have everybody in for treatment.

MR. CURTISS—What do you do with a problem executive, and why do executives develop so many psychosomatic illnesses?

DR. DONNELLY—What you do with him is exactly what you do with the problem employee. If you're psychologically oriented, then you try to work with him; and if you're not, you fire him. Actually, this is exactly what you do. You work with him up to a certain stage, and then he gets so ill or so much worse that you get him another job or whatever method you use in getting rid of the executive that you no longer want to hang onto. With an executive they usually have intelligence which is a little bit higher than average and, secondly, they have a certain type of personality or character makeup which contributes to some extent to so many of the other problems. Have the man talk with the right person, depending upon the individual organization. It's necessary to talk with him so that you make him aware that there is a problem, and then you may be able to get him to talk to somebody who is skilled. You're much more likely to get an executive to do this than the ordinary man on the line. Sometimes, interestingly enough, you can just sit down and say, "Now look, here's a problem, and it may be us and it may be you, and let's try to work it out. It's not a question of blame, but do you have a problem?" And you talk, and that is where the psychiatrist is so useful—not so much dealing with the man on the line, but dealing with the executive, which is where the psychiatrist is usually used in industry.

Second part of the question: Why are they more prone? The reason is that the man who is an executive is a man who's more ambitious. He's a man who has needs which are greater than average. They're usually bound up with his security. Everyone has a certain amount of anxiety in various situations, but as an executive you have a certain aggressiveness and you satisfy your aggressiveness by getting promotions. You satisfy your ambitions by working, and there are certain types of aggressiveness in which you can satisfy your aggression by performance. You get your security by getting promotions. You satisfy your ambitions by working well, getting recognition and getting material things so you can have a better house or anything else or whatever you want. So the executive is the man who has dependency needs, which he is coping with by aggressive go-ahead or by being independent and not taking another person's help.

The go-getter, the salesman—he's getting a great deal of satisfaction by having his product accepted. He is being accepted as a salesman by having his product sold. These are all normal. They are not difficult to understand. And so the executive is a man with this drive. The need for solutions of his problems are the qualification of his insecurity, anxieties, and so on. So he becomes more dependent upon other people. Up to now he's been dependent on himself. He gets to a certain point where he's now dependent upon other people. He expects other people to do what he can do, and of course usually most other people do not, so his insecurity is again threatened. His dependency needs are threatened so then he gets high blood pressure according to how much hostility is aroused or frustration developed. And these are the psychosomatic diseases. Psychosomatic diseases are those which are caused by psychological stress but which show themselves in physical illness, and they are high blood pressure, coronary disease, asthma, ulcers, colitis, quite often arthritis in some form. And these are things which your own colleagues 40 to 50 begin to show. Executives have to push themselves, and that's the price you pay.

Tax Conference

The panel members of this conference which discussed federal taxation and how high the tax ceiling should be with emphasis on the pros and cons of the Association's proposed five-year plan (outlined in the April 1956 issue of *Connecticut Industry*), were: Carroll F. Lewis, chairman, and manager of the tax division, Remington Arms Co., Bridgeport; Roland M. Bixler, president, J-B-T Instruments, Inc., New Haven; Rossman D. Leach, retired manager, Tax Department, Socony Mobil Oil Co.; Arthur M. Okun, assistant professor, Yale University, New Haven; George L. Todd, vice president and controller, The Bullard Co., Bridgeport.

Editor's Note—Because of a strong noise interference affecting the recording of this conference, many of the statements of the participants were blurred, thus requiring a more severe abbreviation of their remarks than was the case in reporting other panel recordings. This situation required writing a condensation of Mr. Leach's views in the third person. Because charts were used by some speakers to better portray tax discrimination against medium and higher income groups and these charts could not be properly reproduced here, it is suggested that a more detailed amplification of the program may be found on page 13 of the April 1956 issue of *Connecticut Industry*.

CARROLL F. LEWIS—We feel that taxes in a good many instances have been the main sources of irritation to governments. They have caused a lot of difficulty when they have gotten out of line and need to be straightened out. We've also seen recently where there has been irritation against tax laws and we've seen places where people have resented taxes and done certain things to avoid or evade taxes. We feel that the tax laws should be just and should be equitable and should not discriminate against any particular type of organization or body. Today we would like to show to you gentlemen where we think that the tax laws do discriminate and where we think that they should be corrected. We feel that some of the economic weaknesses and the lack of progress result from inequitable taxes. In the present tax system there is a certain amount of discrimination, we think, against success. The higher the income goes, the higher the tax rate pyramids. Some of us believe that the present tax structure also acts as a road block to the economy.

It impedes personal ambition and it discourages extra effort.

The black line there on Chart No. I shows the present relationship of rates and revenue in the individual income tax. The black rates represent the 20% that every single taxpayer pays and in this discussion this afternoon, we are going to talk about the basic tax rates as the 20% portion of it. We will see how much of the revenue from the United States comes in this basic element. The shaded figures up above are the varying rates that climb from 2% to 71% and are called the surtax. You can see how little of the national income comes from these surtaxes. According to the statistics that you have there, of the $29 billion 400 million collected in the U. S. from the income tax, $24 billion comes from the basic surtax and $5 billion comes from the progressive rate or about 16% of the whole. It is interesting to note that when you approach $22,000 in earnings, under present tax laws, we take about 50% at the top bracket away from the individual. In that small bracket section, or 10% of the group, we get most of the progression or, say it in another way, you'll note that your individual taxpayer in the middle brackets has a steeper progression than the person in the higher brackets.

That in brief is the basic structure which I am sure that you gentlemen are all familiar with. In order to get us started and to go forward with the plan, I'd like to have Mr. Leach tell you what the five-year proposal is.

(Poor recording—reported in third person) Mr. Leach explained that the Association had adopted a plan for orderly tax reduction which is designed specifically to remove or to alleviate the gross inequities in the present tax structure described by Mr. Lewis. The purpose of the plan is to reduce the progressive element of the individual income tax (that part of the rate in each taxable income bracket in excess of the basic rate, now 20%) by annual reductions over five years so that the top individual rate at the end of that period will be 35%.

For example, the highest tax bracket of 91% consists of a basic element of 20% and a progressive element of 71%. This 71% would be reduced in five annual stages of approximately 11 percentage points, so that at the end of the five-year period, the progressive element in the highest bracket would be 15% which, together with the 20% basic rate, would make a top rate of 35%. The progressive element in all other tax brackets would be reduced pro rata each year, so that the tax reduction plan would directly benefit all individual taxpayers except those whose income falls entirely in the present 20% bracket.



AT THE CONFERENCE on Taxation Rossman D. Leach, manager, Tax Department, Socony Mobile Oil Company, uses charts to demonstrate various phases of the five-year plan of federal income and corporation tax reduction.

At the same time, the plan contemplates a reduction in the top corporate income rate, now 52%, to 35%. This would be accomplished by permitting the reduction of 5 percentage points in the normal corporation tax of 30% to go into effect next April 1 as scheduled, which would bring it down to 25%, and the combined top rate to 47%. This would be followed in subsequent years by four successive annual reductions of 3 percentage points each, or a total of 12 percentage points, to bring the combined top rate down to 35% at the end of five years. The 3 percentage points annual reduction after the first year would be equally divided by the normal and the surtax, so that at the end of the five-year period, the rates would become 19% and 16%, respectively.

Mr. Leach stated that this plan could be put into effect without reducing government income and without increasing taxes of other taxpayers, because the historic increase in the economy measured by the fiscal volume of goods and services of about 3% a year should produce about $12 billion during the five-year transitional period, which will be more than enough to counterbalance the revenue lost through the tax reductions contemplated by the plan. Any reduction in government expenditures or increase in revenues due to a more rapid expansion of economy than the historical average rate of 3% could be used to reduce other taxes.

ROLAND M. BIXLER—How to put in effect the five-year program for the reduction of the high discriminatory income tax rates upon individuals and also the 52% combined surtax and normal tax on corporate incomes of more than $25,000? The key to the answer seems to me to be in this five-year program which has been adopted as official policy by our Association and which has been adopted by more than one hundred associations and organizations within the past few months. We have a built-in growth in our economy, which means that we are not proposing to put this burden on somebody else but rather to use that increment in national income, which occurs in our economy each year. Historically, over the past 60 or 70 years, we have averaged at least a 3% annual increase in our revenues based upon the growth of our economy and the gross national product.

During the decade of 1930 to 1940, the increase has averaged about 3.8%

per year and it has been running between 4½% and 5% per year since 1948. There is a very creditable economic study, headed by Dr. Harley Lutz, formerly of Princeton, who worried that that figure might well be 6%. But, let's be conservative. Let's take the 3% average growth of the last 60 or 70 years. Based upon that, there will be a gain in revenue to the federal government over the five years of roughly $12.2 billion. Lowering the individual income taxes by 16% of the surtax per year, so that at the end of five years we have lined up a combined top individual tax of 35%, would cost $4.7 billion. The corporation income tax is already scheduled to go down from 52% to 47% next April. After that, to reduce each year from there on at the rate of two percentage points per year would get it down to a combined total of 35% for corporations and that is estimated to cost $5.1 billion, so that the total cost of the plan would be $9.8 billion, and this is before we consider any effect of stimulation in the economy by tax reduction.

I have just shown that the revenue will come to $12.2 billion, so that leaves us a net estimated gain at the end of five years in federal revenues (just using the 3% historical growth factor, not taking the current 4½% to 5% or any estimated 6%) of $2.4 billion, which can be used either for reducing the federal debt, embarking on additional programs that the federal government felt was necessary or for what to me would be the most preferable, reducing the first bracket of income. Those possibilities all exist. It certainly would not be consistent for any of us here, myself included, to be thinking in terms of an unbalanced budget but if this plan is put into legislation, there might indeed be a lot less temptation to squander money. Further than that, let's not forget that the second Hoover Commission says that there are still about $8 billion which could be saved by reorganization of most governmental functions. I doubt, frankly, if the $8 billion will ever be achieved but certainly some portion of that is achievable. Certainly we are not using up all the avenues that the government has for debt reduction and, at the same time, offering necessary services.

The question that bothered me when first looking at this program is that while the population is going up at the rate of one-half a per cent a year, aren't our federal expenditures automatically going to have to go up to the same extent? Let's think that through a moment. Aren't most of the per capita expenditures done at the state and local level where we're giving services to individuals or where we're paying for education or paying for sewers or paying for something else that is tied in much more directly with the growth of population; whereas in the federal government our big expenditure is for defense, past and present expenses of war. That really doesn't vary too greatly with the change in population, and therefore, because our population is going up doesn't necessarily mean that our governmental expenditures must go up automatically.

I am sure that what also bothers some of us is, well, what about this tax reduction plan? Is it politically feasible. Can you ever sell a program of this sort? Are you aware that in 1955 the American Institute of Public Opinion, better known as the Gallup Poll, asked the question of a representative cross section of people, "Would you think that a 35% top individual income tax would be fair"? Fifty-three per cent of those polled responded, "Yes," 37% said, "No," and the remaining 11% were undecided.

Do you realize what's working in favor of something of this sort? It's a very homey sort of thing but perhaps the article about Joe Louis, how many hundreds of thousands of dollars he is behind the tax collector, and he gets penalties, interest and if he earned $2,000,000 a year within the 91% tax bracket, he couldn't possibly ever retain enough to pay his taxes and keep on getting out of the hole. Well, that was starting to get down to the general public's level of information. The $64,000 question. How many people have not gone beyond $32,000 because it dawned on them that they can keep only $8,000 if they make the successful jump from $32,000 to $64,000 and they don't think that that gamble is worthwhile. Consequently, they're stopping there. That sort of homely illustration is getting around. People are becoming convinced of the fact that we are not really building the best economic climate with the present tax structure.

The American people have shown themselves time and again to be fair about things when they fully understand the facts, much more so than our political friends give them credit for. I for one believe that if we stand on principles, we have a program. We may not get the entire program in exactly this form, but if we don't start somewhere, if we don't delineate the course of action we feel is right, we certainly are going to be standing here for the next decade wringing our hands instead of moving on to the important job of building our economy, of creating more risk capital by the reduction of the corporate and the individual income tax.

GEORGE L. TODD—I would like to make some comments, Mr. Lewis, but I want to emphasize first that I am most heartily in favor of the end result that you seek to achieve in this so-called five-year NAM plan. I believe that the reduction of the high discriminatory taxes, both on individuals and corporations, could not only be offset with the normal economic growth, but I think it would further stimulate the economic growth of the country. We should bear in mind, moreover, that the high progressive income tax rates was one of the early goals of the socialist countries, and I believe that Marx and Lenin both favored it. It took a constitutional amendment to get it into effect in this country, but we've got to face the fact that we've got it and it is the most fertile soil for political demagoguery that we have. I do not believe that it would be such an easy matter to educate the public. If you introduced it into the curriculum of the public school system and another generation came up with a little different idea, you might get this over but I don't think that under existing conditions today there is much possibility of having any political party back up such a five-year plan.

Now, as I said to start with, I am all in favor of that goal, of the reduced taxes in the higher bracket and of the reduced corporation tax. Such a reduction entirely in the higher bracket would tend to throw the tax saving mostly to the savers—the people who form capital in this country. That would be all to the good because, right now, I think the reason there is a great deal of stringency in the money market is because the demand for capital goods, construction and equipment at this time is much higher than we have experienced in a great many years. I think it contributes very heavily to the type of money market at the present time. If we have more of that available equity capital seeking investment, it would be helpful. However, we must remember, too, that we need the relief in the lower brackets to a certain extent too because all of this capital is going to require the spending of money

and even perhaps in larger proportions than they are now spending. I feel, myself, that if a program could be produced that would give the higher percentage reduction in these higher brackets and at the same time reduce taxes in the first bracket, we could much more readily put that over and get it into effect, get it accepted within a Congress' lifetime two-year term. The stimulation that added investment capital would give to the economy along with more purchasing power on the part of the mass of the population would increase economic growth at this higher than average of 3% that we talked about to more in the neighborhood of 4% or 3½%, or something like that, and that we could maintain a current level of government revenue with a tax reduction.

ARTHUR M. OKUN—The tax program has been supported by speakers that preceded me on essentially two grounds. One, that of tax fairness, and one concerning the economic effect of taxes. I have no answers on tax fairness. I don't think there are any cut and dried answers, any principles or rules to refer to on the question of what constitutes equity in taxation. I do want to caution some moderation simply because I do not think that there are hard and fast rules. I think that some harm can be done by the indiscriminate use of such adjectives as discriminatory and the like with regard to our present taxes.

Our present tax laws, duly enacted legislation under the democratic process, provide for a higher rate of tax to be paid by people in upper-income groups. People in higher income groups shall pay a larger fraction of their incomes and a larger fraction of each extra dollar of their incomes in the form of income taxation. This has been justified as an application of the ability-to-pay principle. People's ability to pay taxes, to part with income, grows in proportion with the size of their income. I don't suggest; I don't wish to argue if this is necessarily the only interpretation one could give to ability to pay or that it is the right decision. As I have suggested, I don't know what the term "right decision" means here. I think what I feel is some sort of intuitive sense of fairness to the public, but I do suggest that the tax law we find today is a duly constituted law enacted presumably in consistent desire with the wishes of the voting public and that while one has every right to oppose it, one finds it very difficult and should avoid appealing to some sort of natural law which opposes the progressivity of our tax system.

One contribution I feel I can make to the question of fairness is to clarify the exact nature of the degree of progressivity in the present tax. One way to do this perhaps is simply by referring back to Chart III which our chairman spoke of earlier. Take the $16,000 type of taxable income bracket. The chart indicates that what the taxpayer keeps is 50% and what the tax collector takes is 50%. That may well be interpreted as a sign that a person with a $16,000 taxable income pays $8,000 in taxes. If it were interpreted in that way, it would be an incorrect interpretation. A single individual with a $16,000 taxable income today pays $5,200 in taxes, not 50%, but somewhat less than 30%, or one-third of his income. Where does that 50% figure come in? That's his so-called marginal rate. That's the rate that he pays on each extra dollar of taxes in the range between $16,000 and $18,000.

Taxable income, to be more technically accurate, surtax net income, is income after deductions and exemptions. Even for the single individual that we discussed, a taxable income of $16,000 probably reflects an income in the more normal personal income sense of the word of $18,000 to $20,000.

Furthermore, 80% of all income earned in the United States is earned by people who are entitled to split income provisions—to the benefits of the marital deduction enacted quite justifiably in 1948. What that means is that a married person hits that 50% marginal tax bracket when he has a surtax net income of $32,000. Take his exemptions and deductions into account; that means that a married man has to earn $39,000 before he begins to pay 50¢ on each extra dollar in the form of taxes, and his total tax bill on this $39,000 of income will be $10,400 or about 27%, not 50%, of his income. Incidentally, considerably fewer than one-half of 1% of all American families reach into this bracket. This does not take into account such things as long-term capital gains, tax-exempt securities and the like. If you look at the figures for the last year for which there is complete data, 1952, one finds out that in the income group, that is just the gross income, exceeding $100,000, 53% of all income was taken by tax.

If one considers all long-term capital gains to be income, then the relevant figure becomes not 53% but 45% of income. That is, 45% of all income in the bracket of $100,000 and up was taken in tax in 1952. Since then tax rates have been cut somewhat so that our present day rates would be about 3% lower. This does not consider tax-exempt income on bonds, exemption of interest of life insurance savings, pensions, deferred payment plans, such mechanisms for tax minimization as family corporations and trusts, all of these providing some sort of limit to the progressivity of the tax. Lots of these are loopholes and I would say that the National Association of Manufacturers and, I take it, the Manufacturers Association of Connecticut has stood against these loopholes pretty consistently and I would say admirably. The fact remains that during the present tax system it is still possible to earn a sizeable income after tax and many people are doing precisely that, fortunately for them and perhaps fortunately for the country.

Look at the question of the feasibility of the program in terms of its economic effect. You've heard one important claim—namely, that the tax reduction program is being accomplished without shifting the burden to anyone else, without raising anyone else's tax rates. Mr. Bixler pointed out that the bulk of the Association's program in terms of rate reduction would be about $10 billion. That doesn't include the 5% reduction in corporate profit tax which is already scheduled. That would cost another $2½ billion and would eliminate this play between the $12 billion revenue increase projected over the next five years and the $10 billion reduction in revenue anticipated from the Association's program.

Assuming that it is true; we could have a balanced budget and we could have this tax reduction program if federal governmental expenditures were not increased at all within the next five years. I suggest that this is quite an unlikely possibility. The President's budget message for fiscal 1957 calls for $1.3 billion higher expenditure over 1955 despite a one-quarter billion dollar reduction in the defense spending. There were such items as a $200 million increase in atomic energy development, $400 million for more housing and related expenditures, $200 million for school grants, a $600 million increase and interest on the federal debt. To quote the President, who said, "Budget revenues now permit us to undertake some new programs for enhancing opportunities for human well-being and economic growth." Let

me focus on that last statement, "to undertake new programs for enhancing opportunities for economic growth." I think that there may be a tendency to forget that many government expenditures are of the sort which are very constructive, very important in economic growth. The dollar spent on education may be a very important factor in determing the way in which our economy will grow in the future. Increasing studies of manpower and skilled manpower in the Soviet Union and the United States indicates that this is a serious problem that confronts us—that of keeping up with the skills developed under the Soviet education system. It's all very well to say that this is a matter for the state and local governments to handle but they aren't handling it. If they don't handle it and if it is to be handled at all, it's going to take some federal expenditures. The question is: Shall we have the education? Shall we have the skilled manpower, or along with it, the extra federal expenditure, or shall we do without?

The same argument can be made with regard to the peaceful uses of atomic energy which is under government supervision presently. I should say that apart from national security which no one can predict, federal spending is not likely to and, I would say, should not remain at the same level over the next five years that it is today. There are opportunities for enhancing economic growth through the use of government spending on appropriate collective services, the kind of things that private enterprise is not in a position to supply, such as education at the lower level.

Let me make one or two comments on the incentive effect of taxation. People who are confronted with very high tax rates would find that they are less willing to work—not worth as much to put in a little bit more effort. But, there is another side of this coin that should not be ignored. Namely, that because of the high tax rate, it has become harder for individuals to retire, it becomes more necessary for them to work, in order to maintain a given standard of living.

Study after study done by independent researchers demonstrate the fact that the two opposing forces of high income taxes seem by and large to cancel out each other. I can quote any number of such studies on executives, on surgeons, and on laborers, for that matter, all of which suggest that the rates of taxation have done as much to keep people working when they would otherwise be retiring as to retard their willingness to work to high marginal rates on each extra dollar of income they earn.

It is true that high taxes leave less for the upper income groups to save. Whether we consume too much, save too little today is a question that can be put forward. A higher rate of investment would probably mean a higher rate of economic growth. Whether a higher rate of saving would mean a higher rate of investment is certainly something I can call into question and certainly that is what is being assumed by the tax reduction program of the Association.

Corporations have demonstrated time and again that they can turn retained earnings into liquid assets, into increases in their contracts, decreases in their debt, and building up their holdings of government securities, if they didn't find the time right for actually building capital goods to increase their production capacity. On the other hand, in many years when corporations have not had large retained earnings they have gone into the market and borrowed substantially in order to build plant and equipment far in excess of what they were able individually to pay. There is no direct connection. There is no link between saving and investment which guarantees us that a higher desire to save on the part of the public will actually be manifested in terms of more capital goods. They will be manifested in part in terms of fewer consumers, fewer sales of consumer goods, and this may have a very severe depressive effect on investment and may lead us towards the problem of depression, unemployment and means more deficit spending and increases in the public debt.

Panel Discussion

QUESTION—What was the budgetary surplus last year and what is it going to be the coming year? What do you think the outlook is for that in the next five years?

MR. OKUN—The federal government just managed to scrape up a surplus for fiscal '56 in the $200 million range. Probably as things stand for fiscal '57, we should have a two to three billion dollar surplus. That presumably gives us something to play with but that projects current tax rates over the entire fiscal year.

MR. BIXLER—Actually, don't you feel that there are some further opportunities for savings in government without pulling the props out from a number of government programs that are currently in effect? Don't you feel that there is some waste in the present level of expenditure?

MR. OKUN—I watched a good number of years go by when concerted efforts were made to reduce this waste. The returns have not been astounding. They have been nowhere near what the Hoover Commission projected in any case and my guess is that we are running into even further diminishing returns in this effort to roll back on waste and inefficiency in the federal government. I don't look for any miracles in that regard.

QUESTION—Would the reduction of taxes on corporations increase the return of revenue from taxes on individuals?

MR. TODD—I don't know as I know anything about the statistics on it, but to the extent the tax saving was distributed in dividends, it would increase either the savings or the spendable disposable income of the individuals. On the other hand, I'm inclined to believe that the reduction in the corporation tax would eventually find its way into a reduction of prices more than anything else.

MR. BIXLER—May I add something I forgot. It seems a good part of the economic growth we've had is because in essence we took the tax shackles off the corporations and said, "Go out and invest this money because we're going to let you charge it off faster." The net result is the same as giving you a lower tax rate on it. I predict, to some extent at least, that by a reduction of the corporate tax we'd get some of the things back we had when accelerated depreciation was introduced. Too much of what is being invested now is really just buying back, replacing obsolete or worn out equipment, only it costs a lot more money to do it now after inflation than previously. Much money is being plowed into equity financing today for plant and equipment but it doesn't mean that we're growing at the same rate as the investment is being made.

QUESTION—Do you think that the steeply graduated rate of the present tax structure makes it extremely difficult, if not impossible, for a small business to grow?

MR. OKUN—I think that probably one effect of high tax rates is that it does become more difficult for a small corporation to grow by internal financing. I think that a small corporation is in the worst position to get either equity or loan capital. I think that there

are specific measures which can be taken to deal with that. There are certain federal agencies which have made it their business to provide funds, to make it easier for small businesses to get funds. There has been some progress made in our tax laws in exempting the very small corporation from the provisions against unreasonable accumulation of retained earnings. There are many ways of attacking this problem of the small business. To suggest that the entire reform of our revenue system is necessary for or desirable for the express purpose of affecting the small business is a little bit like saying that you'd better eat the cake so that a few crumbs can trickle under the table so that maybe your cat can have it. If those are your pets and those are the ones you want to benefit, namely small business, you can direct the benefits at them by very definite means of fiscal and monetary rewards.

QUESTION—Is it not a fact that our economy today can produce more consumer goods than can be sold? Witness the 1956 voluntary cutback in automobile production. If so, how would your tax plan help to stimulate the economy?

MR. TODD—I don't know if I can give a satisfactory answer to that. I'll say this, that I think in any free enterprise system there will be ups and downs in production. I don't think that the over production of automobiles in 1956 is anything particularly serious. We over-produced in 1955. Now, with a little hindsight, you could say possibly we should have produced fewer automobiles in 1955. If the automobile companies had to do a lot of price cutting in order to sell cars and still more to get rid of the overproduction of the factories, that's just part of the free enterprise system. I don't think that our tax plan would affect that one way or the other as far as that is concerned. I don't think that the automobile industry's capacity to produce has been over-extended. I think that the market in the future will need all of the auto industry's production capacity.

MR. LEWIS—The NAM and your Manufacturers Association of Connecticut and its tax committees believe that this tax plan can be sold. We realize, however, that there is a tremendous amount of work to be done, a lot of research on your part. If you'll get out and help to sell it, we think that something can be done with it. We may not reach the 35% bracket but we do feel that we'll go a long way toward that if we all get behind it.

Public Relations Conference

This conference session was opened by Philip B. Watson, chairman, and plant manager of American Cyanamid Co., Wallingford, who introduced A. E. Diem, vice president, Dictaphone Corporation, Bridgeport, who spoke on the topic "The Meaning of Public Relations to Free Enterprise." A digest of Mr. Diem's address follows:

The Meaning of Public Relations to Free Enterprise

MR. DIEM—As I see it, "Public Relations" simply means the obtaining of credit from the public for the good that we do for people—all the people—who comprise the public which we usually refer to as society. Moreover, so that we as people may be permitted to continue serving people "Public Relations," as we have defined the term, is an absolute necessity.

If the people understood the free enterprise system, industry would not be compelled to compete against 20,000 commercial and industrial enterprises owned by the Government. In this connection we can all rejoice in the accomplishments of the Eisenhower administration in making a start at getting the Government out of business. It has at least reversed the trend.

If enough of the public understood the free enterprise system, industry would not be compelled to pay taxes to the point where funds necessary for technological improvements are in short supply.

If the people as a whole understood the free enterprise system, private industry would not be threatened as it is today by union monopoly.

If they understood the free enterprise system, we in commerce and industry would not have to put up with the type of political interference we have today. It is a lack of public relations on our part that permits a candidate for high public office campaigning to say, "It is time, I suggest, to write the businessman's administration out of this Government and write the people back in." He provided no facts but he had a wonderful time and the audience is reported to have applauded his remark vigorously.

You can carry the list on from here. But I say if the people understood our great free enterprise system and the benefits they derive from it, they would never permit such abuses as the few I have cited. Hence, it seems obvious to me that there is a need for more effective public relations by all of us.

It is a delicate proposition for an individual or an organization to get credit from people for the good he or it does for those same people. One normally gets credit for the good that he does simply by doing good and then dealing with the facts—not generalities.

I propose this afternoon that every one of us search out the facts—all the facts—in the days to come and then in an organized, logical, simple and interesting manner put them before our employees, our children of all ages in our homes and schools as well as before the people living in our respective communities. We must make use of our newspapers, our company publications, the radio, television, and word of mouth so completely in this regard that the motives of the free enterprise system will cease to be questioned.

The public needs more than ever not to be told but to be made to understand (and there is a difference) these facts:

1. It controls industry through its buying power. The saying "the customer is always right" is not trite. It is not old-fashioned. It is a truth.
2. The public owns industry through millions of stockholders. There are 10,000,000 of them and two out of three have annual incomes of less than $7500.
3. There are millions—well over a hundred million people— who benefit by the investments of institutions such as foundations, educational institutions, pension trusts, and many more—all of which are dedicated to the public good and whose money for these purposes is derived mostly from the earnings on their investments in units of our free enterprise system.
4. How many people know what the free enterprise system does for them through the companies which underwrite their life insurance and where the insurance companies get a large part of the monies to pay for the lives of their insured?



THE "BRAINSTORMING" SESSION in action at the Public Relations Conference.

5. What about the mutual savings banks? I mean the facts of their operation.

6. And, let's never fail to keep pointing to our standard of living—the highest in the world. It is factual that it has been made so by us, the people, through the medium of the free enterprise system.

Let us make certain that people know in detail how this has come about.

Yes, every person is affected beneficially by industry. The college professor is benefitted by the substantial corporate gifts by industry to educational institutions.

The hospital patient is helped through the gifts of money made by industry to build hospital plants. Then there are the great contributions to the science of the cure and prevention of disease, by industrial research sponsored by the free enterprise system. If it were not for our system of free enterprise, would we have the X-ray machine even today? We have come to accept it as nothing extraordinary.

Consider the millions of retired people whose income is derived wholly from pensions and dividends, both of which come from earnings of the elements of our free enterprise system. You know this, but does the public at large?

Consider the college student who never pays his full way regardless of whether he attends a private or state educational institution. The difference between the cost of educating a boy or girl and what that boy or girl pays to the institution comes largely from the earnings of industry through either trust funds invested in the ownership of industry, or by outright donations of money by industry, or taxes paid by industry, or all three.

And where does the money for our social and welfare agencies come from? On the average 80% is contributed by commerce and industry while 20% is contributed by individuals. How many people know this?

These are but some of the facts that we need to support with simple and logical detail to get across to the public. You can add to the list. Only a handful of people understand them today as is evidenced by many surveys made by educational institutions and professional pollsters.

In doing this, let's not fail to confess our sins of the past. Whether or not we like to admit it, we have sinned I have no doubt, since the free enterprise system is made up of human beings, we will continue to sin now and then here and there for a long time to come. There are certain quarters of our society which will not forgive our sins—even though confessed. Neither will they let them be forgotten.

No responsible person would say that established religion should be abolished or even changed in its general basic concept simply because the human beings comprising it have and do sin now and then. Nor would any right thinking or responsible person argue that organized religion is not essential to society simply because of some weakness in varying degrees on the part of individuals, in the area of morals and ethics; or because they don't happen to agree with some efforts of organized religion at times.

My point is that just because certain commercial and industrial organizations, at one time "sinned" by creating monopolies, is not a good reason why we should dilute its basic concepts. Neither is it a good reason now to permit the public to accept union monopoly, for surely monopoly is no better when exercised by organized labor than it was when exercised by organized industry.

We who know and understand the free enterprise system must not only believe in it but we must put the case of its essentiality to society so completely, factually, truthfully and simply that the day will come when the public accepts free enterprise as essential without question so that the same effort now devoted to diluting or destroying its basic tenets will be redirected toward its improvement.

The right to enjoy freedom from political tyranny carries with it responsibilities. The responsibility is inevitably and invariably individual. Nations, communities, churches and business enterprises do not act in the abstract or through inanimate organizations. They function through individuals.

Our greatest common fault is a feeling on the part of us as mortal individuals, that our efforts will not prove effective or helpful. We must all bear in mind that the course of freedom has not achieved the place it now occupies in the thinking of people around the world solely through spectacular activ-

ity by a few heroic people, but rather as a result of the multiplication of the efforts of countless thousands or even millions of men and women who did nothing more than remain steadfast and loyal in their own inconspicuous places of service. Overstreet expressed this idea in the following verse:

"You say the little efforts
That I make will do no good.
They never will prevail to tip
The hovering scale where justice hangs in the balance.
I don't know that I ever thought they would
But I am prejudiced beyond debate,
In favor of my right to choose
Which side shall feel the stubborn ounces of my weight."

The Meaning of Public Relations to Connecticut Industry

MR. WATSON—Each one of you represents a company which, in turn, is a coordinated group gathered to carry on an enterprise providing payrolls for many Connecticut families. These people through their daily sociological contacts influence others. The afternoon speaker at this session has been quoted as follows: "If one person is sold, that person can sell at least 20 other people."

Now that is a basis of public relations or, if you prefer, it represents a line of communications within your organization. Whether or not you like it, you are constantly creating public relations. The basic question is—Are they good, or bad?

What is your organization doing about it? Do you realize that only 120 of more than 1500 member companies of The Manufacturers Association of Connecticut have designated public relations representatives? What are the rest of them doing in public relations?

Of course, it is not practical for smaller companies to fruitfully employ fulltime public relations representatives, yet small business, particularly now in a high-charged political year, has a special appeal to the public. Small business as well as big business must tell its story, and there are several avenues of approach. I will briefly discuss a few of them.

To supplement your own efforts, there is a dynamic public relations force that operates in your behalf. It is the public service organization of all the people in this state, The Manufacturers Association of Connecticut.

What presently are the activities of this organization, and what has been the reaction to these activities? Well, the Association has developed its own health and safety bulletins that were featured as part of The New Haven Register's photo story last Sunday on the Association. These bulletins are specifically written for Connecticut manufacturers and these have been commended by the State Medical Society. The Association has a foreign trade committee that is instrumental in contributing to employment within our state and has attracted the favorable attention of Sinclair Weeks, United States Secretary of Commerce. It has highly competent legal and tax departments. Also, there is that fine Association magazine, known to all as "Connecticut Industry", with its featured stories, its broad pictures of state activities, and many special columns—one of the important ones dealing with our topic of the day, Public Relations. The newly instituted Public Relations Bulletin has had broad acceptance and may serve as a basis for establishing a part-time public service program in one, or several, smaller industries. Our small, but excellent, two-man professional team on the Association payroll is available to assist members desiring to establish a new public relations program or to help solve public relations problems faced by our organization.

Much more must be done—a broader public must be reached. One of the most important segments of our population is that of the high school and college students, their teachers and their families. Not only must we tell them of their job opportunities but, if we are to preserve and extend our free economy, we must explain to them openly and without reluctance the facts concerning profits, taxes, depreciation and all the facets that explain the difference between success and failure in big and small business today. It must be pointed out to them how vital modern industry is to family life in terms of payroll, education, health and recreational activities by industry . . . recreational activities that are tremendously broad and varied but which are unknown to many of the public.

We must dispel the hue and cries of some union officials and politicians about the excess profits that accrue to industry. We must point out the perils of inflation and the pork barrel effect of public power enterprises that take money from the pockets of every citizen as well as business.

How do we do this? There are several ways. Perhaps one of the easiest and best is by working with the Public Relations Department in The Connecticut Manufacturers Association. We have a voluntary speaking service available and able to discuss a large variety of topics. We must obtain audiences. Given the effort we can prevail upon schools to provide time for our speakers to talk to their students. In addition, we should consider working through the P.T.A.'s, the young people's meetings in churches, synagogues, Y.M.C.A.'s, and other places of public assembly. Seventy-one (71) per cent of Connecticut wage earners do not belong to a union. Here is a golden opportunity to tell industry's story to a vast audience. This is already being done in small groups composed of management and wage earners. Such programs under such desirable circumstances must be encouraged. Then there is the possibility of persuading union officers in organized plants to spearhead factual discussions with groups of your employees. Always remember that for each one coming to such a group discussion you have 20 potential listeners behind the scene. This approach with the union is being used right here in the state of Connecticut, and not too many miles from this particular spot.

Now this brief outline cites but a few of the needs of Connecticut industry to activate an overall public relations effort. You gentlemen gathered here are members of many civic and philanthropic activities. Many of you are leaders of public enterprises. Whether you have thought of it or not, you are "opinion leaders." Scores of people watch your actions and heed your remarks—you are, indeed, Public Relations Directors, but in many cases you have not told the essential stories. You are the defenders of the free enterprise system You provide the payroll in the state where industry, in spite of high taxes, is largely responsible for the highest family income in the nation. If you are to keep and cherish this position, now is the time for you to present the story of free enterprise freely, continuously and openly to the public at large. Through the offices of The Manufacturers Association of Connecticut, we will be glad to help you.

Brainstorming Session

The second part of the Public Relations session, called "brainstorming," sought to demonstrate a technique of producing new ideas which may be used to help solve any type of specific

problem facing industry, business or any other type of organization, provided a small group of articulate persons acquainted with the problem participate and that the leader is one who possesses the ability to stimulate panel members to submit their ideas orally.

The leader of this "brainstorming" session was Willard A. Pleuthner, vice president of the New York advertising agency of Batten, Barton, Durstine and Osborn, an outstanding leader in promoting the use of this technique, which was originally introduced by Alex Osborn, a founder of BBD&O, in his book entitled "Creative Imagination As a Public Relations Technique." Although 12 to 15 persons is said to be an ideal number to participate in a "brainstorming" panel, 22 men covering a broad range of experience participated in this panel. They were: A. P. Lombard, Jr., safety director, The Bullard Company, Bridgeport; Paul M. Andrews, director of safety, American Hardware Corporation, New Britain; H. T. Baurer, director of industrial relations, Union Hardware Company, Torrington; Ronald V. Bennett, general sales manager, Fabricating Division, The Plume & Atwood Manufacturing Co., Thomaston; Charles Brunelle, president, Charles Brunelle Co., Hartford; Wallace E. Campbell, vice president, Fuller Brush Company, Hartford; John B. Depot, director of personnel, New Departure Div., General Motors Corp., Bristol; A. E. Diem, vice president, Dictaphone Corp., Bridgeport; J. Howard Donahue, secretary and general sales manager, Pioneer Steel Ball Co., Inc., Unionville; John E. Ellsworth, executive vice president, Ensign-Bickford Company, Simsbury; Paul V. Hayden, vice president, Connecticut Light & Power Company, Berlin; Seymour Ingraham, Washington representative, The E. Ingraham Co., Bristol; Clinton V. Johnson, president, Johnson Gage Manufacturing Co., Bloomfield; William Kilpatrick, public relations manager, Sikorsky Division, United Aircraft Corp., Stratford; Norman Markel, industrial relations director, Gray Manufacturing Co., Hartford; Herbert C. Schick, secretary and treasurer, Torrington Manufacturing Co.; Wallace F. Smith, advertising manager, Waterman Pen Company, Inc., Seymour; E. Russell Trotman, public relations director, Hamilton Standard Div., United Aircraft Corp., Windsor Locks; Philip B. Watson, plant manager, American Cyanamid Co., Wallingford; Martin Wright, president, Martin Wright & Associates, Inc., Guilford.

These panel members were seated around four sides of tables arranged in a hollow square. Mr. Pleuthner, the leader, seated near the center of one table, set forth the ground rules by first quoting Alex Osborn, "Man is blessed with a special talent called an association of ideas. Association automatically gears imagination to memory and makes one idea lead to another . . . we can slow down or speed up that flow depending on what we consciously do." He further explained that scientific experiments had demonstrated that free association of ideas are 65% more numerous in group activity than when working alone and that the following three rules are most important if the idea-producing conferences are to be most productive:

1. Judgment must be ruled out. No criticism until later.

2. Free-wheeling is welcome. The wilder the idea, the better. It is easier to tame down than to think up.

3. Quantity is wanted. The greater the number of ideas the more likelihood of good ones.

The problem is clearly stated at the start of the meeting. At BBD&O the account executive most concerned with the problem is invited in for six or seven minutes (no more) to augment the indoctrination. After he leaves the moderator points to whomever has an idea. He states his thought positively and quickly. A panel member raises his hand to indicate he has an idea to contribute. If a panelist has suggestions related to one just voiced he snaps his fingers and the moderator calls on him next so that a free flow of improvement and extension on ideas can be built. These are called "hitchhikes."

A secretary records all ideas suggested before, during and after the meeting. The moderator edits the list making sure each idea is succinctly stated. The ideas are screened by one or two people. These are the ideas shown to the bossman. He is not shown a full list because its length would probably cause him to say to himself, "I'll put it aside and read it some other time."

MR. PLEUTHNER—You are now going to telecast for the first time a brainstorm session. We should realize that this form of speaking up is not a substitute for any other type individual or group activity in any plant or organization. It is an extra way of helping more people solve problems. At this annual meeting of the Manufacturers Association of Connecticut we shall put on a demonstration of a real problem: "How Can Industry Contribute Leadership to the Community."

In other words, what can the plant do to be of more help to the community? All types of organizations in the community, churches, youth activities, PTA's, etc.

There will be no evaluation. No one will say it is a good idea, it is a bad idea, it won't work, it might, etc. If there is evaluation or negation, I ring the bell.

Well, let's have the first idea.

Editor's Note: Since a transcript of the majority of the 104 ideas suggested at this session were mailed to members during the last week of September, C.I. includes only 9 typical ones, including hitchhikes.

1. Put on your personnel record the outside jobs of your people—what they do in community organizations. Tell your people that on your personnel cards is a record of what they have done for the community.

2. Lend people from your plant organization to the various community campaigns so that non-profit organizations can get competent help.

3. Do not use political influence to try to get your people off jury duty.

4. Take care of the complaints that come into your plant from the outside public.

5. Hitchhike! Have any complaints that come in put on top of your mail instead of the bottom of your mail. Take care of them first.

6. Hitchhike! Have the top people take care of the complaints, not somebody down the line.

7. Have a meeting each year with your local business leaders and set up a plant-community relations board, the same as General Electric has done, so that you have a planned community program supported by the business leaders in the town.

8. Get in the news and stay in the news with everything the company does that is in the community interest.

9. Open your industry to visits of groups of school children.



ASSOCIATION directors, officers and guest speakers made up the head table group. Shown here are Vice President Harrison Fuller, Dr. Robert E. Wilson, President A. S. Redway and Governor A. A. Ribicoff.

EVENING SESSION

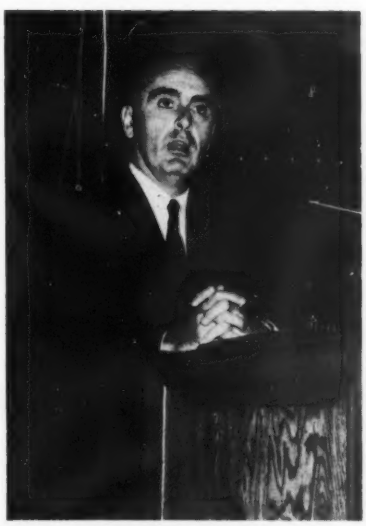
*Address of Welcome**

By ABRAHAM RIBICOFF

Governor of Connecticut

ABOUT a year ago at this time, you may recall I came before this group and thanked each and every one of you and the manufacturing industries of the State of Connecticut for your spirit and cooperation and what your industry meant to the state in the floods of last year.

Now, in 1956, we have new problems which require new ideas and new solutions, and 1957 and 1958 and the years that follow will also present many problems that will require many solutions. I've always been aware of the importance of the manufacturing industries in the State of Connecticut. I think that the records will show that approximately 433,000 people are on the payrolls of our Connecticut manufacturing companies. It is estimated that the total payroll of the manufacturing industries in this state in 1956 will be approximately $2,100,000,000. The direct tax that manufacturers pay in corporation tax will be somewhat in excess of $16,000,000 a year, and that doesn't count sales and other taxes. So, therefore, the manufacturing industry when you analyze it is the backbone and base of the economic life in the great State of Connecticut. I think the records will clearly show that the whole concept of mass production and enterchangeable parts found their inception in the State of Connecticut.



GOVERNOR RIBICOFF

Also, I am aware of great changes that have taken place in the world and in the whole field of industrial development. And all of us indeed would be foolhardy were we not to take cognizance of the great changes that atomic energy is bringing and will continue to bring in the years ahead.

The problem as I see it is what will happen in the State of Connecticut, with the inception of this new means of energy, atomic energy. It is my feeling that the State of Connecticut can really be a leader, could take the lead in the entire country in the utilization of atomic energy in the manufacturing and industrial processes. When you analyze it, you will find today that taking the size of Connecticut, Connecticut probably has as diversified, and as an important a stake in atomic energy development as any other state in the union. You have United Aircraft in East Hartford. You have Electric Boat in Groton. You have American Machine & Foundry coming in, in Greenwich. You have the building of a new atomic laboratory in Middletown, and Combustion Engineering has come into Windsor with a large staff.

What does the State of Connecticut have to do to keep this lead? I have put considerable thought into this problem and since the basis of atomic energy development depends upon education, since the basis of this development depends upon a large reservoir or pool of skilled people it becomes important that Connecticut stay in the lead and have the imagination to make sure that we supply that pool of trained people.

**A condensation from a recording.*

I think you, all of you, individually and collectively—know me well enough to know that my philosophy is that basically if private industry can do a job then government should not undertake it. However, I also believe that if there is a job to be done that private industry, because of its resources, because of the general public welfare which is involved and which militates against one company assuming the burden, that for the general welfare of the people of the state, then government does have a right to come in and be of assistance.

Now since education is important, it would seem to me that the State of Connecticut should consider the advisability, out of state funds, of making available to the educational system of the State of Connecticut an atomic energy experimental reactor. This atomic energy experimental reactor can be placed in that location of the state where it could be best utilized for training purposes for our colleges and universities in the State of Connecticut.

Secondly, we have another problem. The great problem that we have is that our colleges and universities are hard-pressed financially. Furthermore, our colleges and universities have a great, great problem of recruiting the proper engineering teachers to teach the engineers that you gentlemen need in your factories. Basically in the process of competition the industries of our state and the United States, paying the salaries that they do, can out-compete the universities and the colleges in hiring men in the important teaching of engineering subjects. But, this is a self-defeating program because if this continues you are not going to have a pool and reservoir of trained men to go into your own industries. And it is my suggestion that not only the industries of the State of Connecticut individually and collectively make donations and contributions of sums of money to establish chairs of engineering in our colleges and universities, but even more so, the large industries of the State of Connecticut should allow some of their men to take a sabbatical, either part-time or for a year or two to fill in at our universities in the State of Connecticut to allow the training of the men that we need so badly in the state's industries to make sure that we are not stripped clean.

It would seem to me that in view of the need to train more engineers, and the fact that many students have a difficult time paying their way through college, Connecticut industry could very well establish fellowships in our colleges and universities. And experience shows that these men who undertake and accept such fellowships usually go back into the industries that supply the fellowships.

Now consequently tonight in this speech, I am asking the Atomic Energy Advisory Committee which we have in the State of Connecticut, composed of men who are leaders in the field today of atomic development in the State of Connecticut, to undertake a study concerning the advisability of what I have just proposed to this group and report back to me by December 31st. If the report of this group of men, all of whom are familiar to you, is a favorable one I am ready to go to the next session of the Connecticut legislature asking for an appropriation to create an atomic energy experimental reactor for the State of Connecticut so that the State of Connecticut can be in a position of supplying and training the technical needs and skills of the industry of the State of Connecticut. But this is a tough problem. The state cannot do it by itself. We are going to need to have the cooperation of the manufacturing industry in this state if we are to succeed. And consequently during the months ahead many of you will be asked in private discussions by this group of people concerning your ideas and your thoughts. I, too, will be speaking to many of you individually in the months ahead to try to canvass this entire field. And I am confident that the ingenuity and the foresight and the leadership of the Connecticut manufacturing industry, working together on a program such as this, can assure and reassure the leadership of the State of Connecticut in the United States of America in the new atom age that is presently dawning.

And I therefore use this forum to project these thoughts and these ideas. I welcome discussion from each and everyone of you here. I hope that those of you with ideas will write me. If you think it's a good idea, tell me so. If you think it's a bad idea, tell me so too. And I hope that your Association here, tonight, when you meet in committee later on will appoint a group of your own leaders in the industrial field to meet with the Atomic Energy Advisory Committee to the end that the great industrial economy of the State of Connecticut can continue its lead in the future.

This, to me, is government and private industry working on the soundest level, on the soundest basis without one encroaching upon the other but each reassuring the general welfare of the entire State of Connecticut.

THE PRESIDENT'S REPORT

Part I—Association Activities*

By ALBERT S. REDWAY

You will be interested, I am sure, to know some of the highlights of the Association's activities during the past year:

The General Assembly was not in regular session this year, but a special disaster relief session was called by the Governor last December. While this session was primarily to take action on flood relief, a number of the matters vital to industry did come up at the session. However, the major action was directed toward relief to individuals and towns affected by the floods.

*Not included in annual meeting address.

Industrial Relations

Our staff has continued to be of great value in advising members on all phases of industrial relations. To meet this demand, our files of information on all phases of industrial relations has continued to grow at a rapid pace. Excellent cooperation of all member companies in supplying facts about their practices and experiences has enabled the association to better serve its members. Fortunately our staff is well qualified to advise members and interpret the laws and regulations pertaining to labor-management relations.

Among the types of information that have been expanded materially during the past year are arbitration decisions and employment practices of our members. To increase the acquaintance of members with the decisions of impartial umpires, resolving ordinary dif-

ferences which arise between employer and employee, three of these decisions have been published monthly for the past several months in a new department of Connecticut Industry called, "How Would You Decide?" These interpretations of the rights and duties of employees and employers serve as guideposts for management action in both organized and unorganized companies regardless of size.

Our Industrial Relations committee has continued to be very active and upon its recommendation, a state-wide survey of employment practices among our members was undertaken. The results have been tabulated and much of the information has been distributed. While many inqueries are being recieved concerning certain phases of current employment practices revealed by the survey, much of the value of this project will come from repeating the survey each year. This we plan to do as it will show the development of trends or the stabilization of certain practices.

Insurance

Growth in our Group Life Insurance program has been little short of phenomenal. We now have $120,000,000 coverage for 17,600 employees, in 655 of our member companies. This is an increase over a year ago of more than 30% in dollar coverage, 24% in number of employees and 53% in number of companies.

Since our last annual meeting, $497,000 have been turned back to insured members as a rate credit and an additional $640,000 have been paid out to beneficiaries.

Starting July 1 of this year, the annual premium was reduced by $1.00 per $1,000 of coverage, making the present rate $4.00 below contract rates. In addition, Accidental Death and Dismemberment coverage was added at no extra premium charge. This new provision doubles the face value of the present policy in the event of accidental death and provides payments for accidental loss of arms, legs, or eyes.

While the Association's Supplemental Hospitalization Insurance and the Sickness and Accident plans have not experienced the dramatic growth of the Group Life Insurance plan, they have been expanding at a satisfactory pace. Rates have been kept at low levels because of a favorable loss experience and low administrative costs.

The Major Medical Plan, inaugurated July 1, 1955, now has 155 member participants with 2,200 executive and supervisory personnel covered under the plan.



A. S. REDWAY

During the past year, a Health and Safety Committee of twelve physicians and laymen was organized to advise the Association's membership on health and safety practices. Its first project was the launching of a series of Health and Safety bulletins that are being developed by committee members to serve as a guide to manufacturers, particularly the smaller companies, in inaugurating in-plant medical programs. Since last April, our Insurance Department, which executes the work of this committee, has mailed the first five bulletins in this continuing series. In effect, they will virtually constitute a course in the best known methods of conducting an industrial health and safety program.

Transportation and Foreign Trade

During the past year the rising wage pattern in the motor truck transportation field has caused many motor carriers to make hasty and indiscriminate demands for higher freight rates. In opposing such blanket rate increases the Association has emphasized that the surplus of motor transport facilities in the area has created inefficiencies which, in turn, have raised operating costs and stimulated the demand for unjustified rate increases. We have also taken a vigorous stand in opposition to freight rate increases by other forms of transportation and are presently participating as a party in several proceedings now pending.

As might be expected, the highly competitive buyers' market at home has continued to spur increased interest among our members in developing foreign markets for their products. As a result, the day-to-day volume of inquiries, requests for market survey information, and a wide variety of advice on various phases involved in selling and shipping to foreign markets, has been brisk throughout the year. The number of translations handled by our translation service has also been very much heavier.

Taxation

One of the most important projects undertaken during the past year has been the formulation by the Taxation Committee of a five-year plan for the reduction of the progressive element in the federal income tax structure—a plan subsequently adopted as an official Association policy by the Board of Directors. The plan has been widely publicized through "Connecticut Industry", the press, bulletins, and through the Taxation Conference held at our annual meeting.

Another notable project by the Taxation Committee is a state-by-state survey among member companies with plants in more than one state, to ascertain the business taxes they paid in other states. Armed with these facts, the Association will be able to inform committees in the next General Assembly how the tax burden borne by Connecticut industries compares with that imposed upon them by competing industrial states. During the past year much time has also been devoted by the Taxation Committee to the problem of multiple overlapping interstate taxation of corporate income. The Committee has worked closely with the National Industrial Council, of which your Association is a member, which is attempting to settle some of the most pressing problems in this field by means of litigation and corrective legislation.

In addition to these special projects, our taxation service keeps member companies informed on all pertinent changes in business tax laws and regulations, both federal and state, and also advises them each week on the status of all federal legislation affecting industry. Interpretation of these laws and regulations is often requested.

Industrial Development

The Association continues to receive and service innumerable requests for information on a wide variety of topics.

They include such things as sources of new products, mailing lists, factory space, machinery, market data, subcontract work and facilities, and many more. Many people come to us for names of companies that may be purchased. Others request sources of additional capital. We also cooperate with the Connecticut Federation of Women's Clubs in arranging "Industry Day" plant tours; and as members, work with the Connecticut Council on Education, the Connecticut Council for the Advancement of Economic Education, and the Natural Resources Council.

Currently, we are attempting to assemble films of an educational nature that tell the story of American industry and the American enterprise system so that we can build up a film library. We hope to have 10 or 12 films on hand by late Fall so that a descriptive catalogue can be prepared and the film library actually in existence early next year. If any member has a good film that may be added to the library, we would appreciate it if he would advise the Association.

"Connecticut Industry"

The Association's magazine, "Connecticut Industry", continues to be one of our most effective means of communicating with our members and of telling our story to a large number of non-members. The magazine averages 72 pages per month and has brought in an income of slightly over $3,000 per month for the past two years. It is nearly self-sustaining, due to its very effective advertising and the capable way in which it is handled by our staff.

Public Relations

Our public relations program which was established in 1954 has been actively carried out during 1956. We initiated this program to tell the story of Connecticut industry to the general public, and to assist our members in handling their own public relations programs.

More and better press releases, photographs, and stories about industry were published by the daily and weekly newspapers in Connecticut. Many editors were visited personally by our staff and were later serviced with photographs and press releases that not only were published in news form but also brought forth editorial comment.

One event that was given wide publicity was the "Machine Shop Proficiency Contest", conducted in May by the Vocational Department of the State Board of Education in cooperation with the Manufacturers Association of Connecticut.

The public relations bulletins to our members were issued more frequently than in the past, giving much information helpful to them.

A very successful series of 15-minute radio programs entitled "After High School, What?", were introduced in cooperation with WTIC. Four of these programs, prepared to give students in high school assistance in selecting vocations, were staged in June, and more will be coming this Fall. Each program deals with the employment opportunities of a different industry and permits the students on the program to ask questions of the participating executives about job opportunities.

Several more publications were distributed this year including, "What's Your Problem?", which was a promotional piece mailed to members and prospective members; and now about to be released is a brochure entitled, "What Is Your Future In Connecticut", which points out a bright future for Connecticut provided we do not tax industry out of the State. This will be distributed not only to members but also to opinion leaders.

Membership

The splendid work of our field representative has added another 213 members since September last year to bring our total membership to 1,566 companies.

Because our membership is predominently small companies with 72% of the members employing less than 100 employees, a tremendous number of calls must be made in order to keep in touch with industry throughout the State. Our field representative, in addition to calling on prospects, also calls upon members themselves to learn firsthand of the problems which the Association staff might be able to solve or help solve.

Part II—The Threat of Union Monoply*

A WISE philosopher once said, "The wise think twice before they speak; the otherwise speak twice before they think."

I hope you will agree that I am not among the "otherwise" as I speak to you briefly for the second and last time as your president. The Association presidents are not allowed to serve more than two terms; therefore, my duties will be completed on December 31.

At this time, I wish to extend my thanks to the other officers and to the directors of the Association for the fine support they have given me during the last two years. Above all, I wish to thank Mr. Norris Ford, the Executive Vice President, and his very efficient and loyal staff which has continuously and successfully striven to give the best possible service to our membership.

I am going to discuss briefly a subject which is of vital concern to me and should be of vital concern to every manufacturer in the State of Connecticut.

Our country stands today at an economic crossroads. One road leads to continuous inflation, which is a rough road fraught with danger; the other leads to orderly economic growth and is a safe superhighway.

The safe road of orderly economic growth avoids the perils of inflation on the one hand and the evil of unemployment on the other. The way, the only way, to stay on this safe road is to pass on to all the people the benefits of our improved production methods and technical advancement.

This road is unavailable, however, as long as labor unions are permitted by law to exercise monopoly powers.

As an association we are neither pro-nor anti-union in this matter. We simply believe that uncontrolled power in any quarter is a menace to freedom and dangerous to American traditions and concepts. The power in the hands of a small group of union officials is being seriously abused and, if allowed to go unchecked, will breed still greater abuses.

Abuse is evident in wage demands which bear no relation to productivity; in compulsory unionism which violates the rights of individuals; in "featherbedding", "make work", and other restrictive practices which cause eco-

**Delivered at annual meeting.*

nomic waste, and in lawless violence which has brought shameful assaults on persons and property, such as the Victor Riesel case and the Kohler Company. Obviously, our free representative government cannot endure unless we can put an end to a system which arbitrarily exacts contributions out of the pockets of workingmen for the support of political candidates who will do the bidding of union leaders.

The American people are opposed to monopoly power and practices in business. They are equally and determinedly opposed to monopolistic power and practices by unions and will demand an end to such practices if they know the facts.

At least one important source of the union monopoly that now bothers business and industry stems from the decisions of our courts which have held that existing anti-trust laws do not apply to labor unions. This immunity means that rules of conduct governing other segments of our economic life do not apply to organized labor. This double standard has prevented businessmen from participation in activities that have been practiced with impunity by labor unions.

The recent merger of the AFL-CIO emphasizes the growing trend toward big unions and big business. As the unions have grown in size they have extended their bargaining from single employers to regional groups and ultimately to the substantial employers in a single industry. In this manner, when a pattern has been set for a big business, the small employer must ultimately meet the same wage level as that established for his larger competitors. If lack of finances and modern equipment prevent him from doing this, he is practically compelled to sell out. This is one of the primary reasons for the many mergers that have taken place in Connecticut.

James Hoffa, vice president of the Teamsters' Union, recently said, "The future of labor management relations is big labor and big business, for there is no room for the small business or the small union." In the event that Mr. Hoffa is successful, it is obvious that the Connecticut way of life—where small and big business cooperate so harmoniously—would be shattered.

At the present time, 59% of our members employ less than 50 people, and 72% employ less than 100. The question is whether these small manufacturers who have been the backbone of our state economy can continue to operate in the face of growing union monopoly.

It has been said that "management" never wins a strike. This assumption goes beyond the loss of production and takes into account the insidious and far-reaching social evils that appear long after the strike has ended. The unions consider the "right to strike" as sacred. We won't argue about that here. But there is a vast difference between the right to strike and the right to quit work. The right to strike includes the right to hold a job without working at it. It is the right not only to quit working but to keep others from working in your place. This is why the unions rarely, if ever, win a strike without violence or the threat of violence.

The fact that its employees are on strike is not evidence that the company's pay is low or working conditions poor. Quite the opposite. Unions seldom strike poor companies, and employees won't walk a picket line to protect a job they don't like.

Even though time is limited, this discussion would be incomplete without some reference to the "right to work", which is as basic as the right to breathe and the right to use one's eyes. No individual can be deprived of these natural rights without moral violation.

Rev. Ferdinand Falque, pastor of Sacred Heart Church, Staples, Minnesota, says, "The founders of this nation established a government and constitution which recognized and protected the freedom of individual men. Both are premised on the query: "What exchange shall a man make for his soul?".

He points out that "not even the perfect society of God's Church was chartered to compel the salvation of souls . . . but labor unions are *not* perfect societies . . . they can never rise above being voluntary associations of free men; to argue that they must compel membership to achieve their ends, would be to confess that they have no ends worthy of achievement."

We sometimes wonder if today's union leaders have repudiated organized labor's grand old man in the same manner that the Commies have repudiated Stalin. Mr. Samuel Gompers was devoted "to the fundamentals of human liberty, the principles of voluntarism". He said, "No lasting gain has ever come from compulsion."

There are other facets to this subject that might well be discussed if time allowed, but now we come to the crucial question: How shall we deal with labor union monopolies? There is no doubt of their existence. We have today something like 17 million wage earners organized in unions of enormous size and power even though 75% of all non-agricultural workers have chosen not to belong to a union.

We suggest the following program to curb union monopoly: 1) Restore state and local authority in order to assure adequate protection against private coercion. Federal laws, which largely take precedence over state laws in labor disputes, have usurped the authority of state and local governments to deal adequately with strikes and picketing. 2) The exemption from the provisions of the Sherman Anti-Trust Law now enjoyed by the unions should be clearly limited. 3) Compulsory unionism should be legally restrained. Special privileges for unions are contrary to sound public policy. It is an outrage that a free American should be compelled to join and to support, and to submit to discipline of any private organization with which he does not wish to be affiliated. The

(Continued on page 78)



OVER 700 representatives of Connecticut industry attended the evening session at Yale Dining Hall.

Ethics and Principles in Modern Business

AN ADDRESS

By ROBERT E. WILSON, *Chairman of the Board*
Standard Oil Company (Indiana)

My principal excuse for speaking on this subject is that, although we both know the facts, neither of us has done enough to get these facts across to the public, and all of us suffer because the public does not appreciate the true present situation. In view of repeated demagogic attacks on business, I hope you will help to spread the story more widely.

I think part of the blame for this public attitude lies in the usual type of novel, drama, or TV show laid against business backgrounds. Possibly because every drama must have a villain, and preferably a powerful one, they usually present a highly distorted picture of the business world. As Donald L. Rogers, Financial Editor of the New York Herald Tribune, has observed, a recent highly successful novel "asks us to believe that a shallow, obvious faker has a better chance to succeed in the business world than a well qualified expert." In an enormously popular TV play "dishonesty, ruthlessness and absence of ethics are deemed to return the handsomest profit."

Mr. Rogers finds that such authors see business in a cracked mirror. He writes, "I am on familiar terms with several hundred top-rank corporation executives. I don't know a half-dozen who could be considered overly hard-boiled or ruthless. I don't know many who did not gain their top jobs just because they are more capable than other men and more willing to work hard."

He then suggests that some business organization establish a fund and award grants to professional novelists, "permitting the authors to take sabbatical leaves so they can learn what American business is *really* like," instead of getting their ideas from *other* novels or TV shows

I think that's a splendid idea. Art is supposed to mirror life. But some of our most talented writers seem to have a picture of business and business men that either ceased to be accurate long, long ago—or that never was accurate.



DR. ROBERT E. WILSON

The Meaning of Ethics

In discussing the question of ethics, I do not propose to engage in any dissertation as to the philosophical meanings of the word "ethics." I think we can agree that its essential meaning is simply knowing right from wrong, and picking the right way to live one's individual and business life. It means being able to say with Saint Paul: "We have wronged no man; we have corrupted no man; we have defrauded no man."

Nor does the question of how to determine just what is right and what is wrong seem to me to constitute any very difficult problem. Our conscience is our guide. Equipped from childhood with this remarkable device for telling right from wrong, man seldom fails to know which he is doing—and the person to whom it is done also knows!

However, not everyone's conscience is an infallible guide. It needs early nurture from both parents and teachers. Like a compass, which shows aberrations when brought under the influence of abnormal magnetic fields, an individual who continually associates with people of low standards and avoids the corrective influences of frequent attendance at religious services and association with men of high honor is likely to find his conscience getting off the beam.

Our consciences seem to have another weakness, this one not shared by the compass. At least I have never heard that a compass to which no attention is paid, ever stops pointing to the true magnetic pole; but a conscience which is never heeded certainly does not long stay in good working order. And a person without a sensitive and reliable conscience is—like a ship in a fog without a compass—sure to get into trouble sooner or later.

What is Happening to America's Moral Climate?

Before discussing the matter of ethics and principles in business, it may be well to orient ourselves as to the general ethical situation in the country as a whole. Are we in a period of general retrogression in the ethical standards of our generation, such as is generally believed to have followed the first World War? Many things seem to point in that direction. Most newspapers are filled with stories of crime, lust, and crookedness. The Kefauver investigation showed that many of our large cities are hotbeds of gambling and vice, with gangsters making millions and debauching many of our officials and enforcement officers.

The finding of traitors in high places and the revelations of a year or so ago regarding the widespread use of influence and bribery in the RFC and the Internal Revenue Department dealt a severe blow to our traditional confidence in the honesty of the agencies of our Federal Government. The Roman Catholic Bishops of the United States, gathered in Washington for their annual meeting a few years ago, issued a statement which made sober reading. They said:

"An alarming parallel exists between the situation facing us today and that which faced the Roman Empire 1,500

years ago . . . barbarism on the outside, refined materialism and moral decay within. . . . The lessons of history are evident to those with eyes that will see. The Roman Empire disintegrated from within, and moral corruption was the main cause. . . .

"In politics, the principle that 'anything goes,' simply because people are thought not to expect any high degree of honor in politics, is grossly wrong. We have to recover that sense of personal obligation on the part of the voter and that sense of public trust on the part of the elected official which give meaning to political life. . . ."

Even our college sports, long considered to typify some of the best American traditions, have in some places been corrupted by gamblers. Also, several institutions have found that cheating was commonplace and widely condoned among their students.

Our standards of international morality have slipped so far that when some nation abrogates a treaty or nationalizes an industry, or a canal, few newspapers bother even to discuss whether or not the nation had the right to denounce the treaty in accordance with its provisions, or whether or not the nationalization was in violation of a firm contract. . . . General international recognition of the importance of sanctity of contract will do more to promote foreign investment and sound international trade than a dozen Point 4 programs with their heavy burden on American taxpayers.

Does all this indicate that the American public has become hardened to crime? Are we slipping back from the high standards and ideals which have long characterized our nation, into a state of low morality such as prevails in some of the less enlightened nations?

Some Encouraging Factors

My answer is that Americans generally do not accept or condone either private or official corruption. The tremendous interest in the Kefauver hearings and the public indignation they aroused are highly encouraging evidence of our national conscience. In most of the elections in recent years where there was any clear-cut issue between a corrupt administration and one that gave assurance of a thorough housecleaning, the corrupt machines were almost universally swept out of power, regardless of party. I believe that trend is continuing.

Another encouraging fact: church membership in this country is at an all-time high. More Bibles were bought in the last ten years than in the preceding forty. Record-breaking numbers of students are entering the ministry, and more and more people are coming to realize that in the church lies our best hope of getting back on the right track of national and international morality.

Again, many individuals who are personally upright, but who have in the past taken little part in organized religious activities, have come to realize that they cannot continue to be "free riders," enjoying the benefits of the religious background of our nation without doing anything to perpetuate it.

Maybe a simple illustration will help to make us appreciate how much we all benefit by the generally high moral climate in America. A refugee came to New York not long ago and spent her first night with friends in a modest walk-up apartment. Early in the morning she stepped out on the back porch overlooking many similar back porches, and came back with eyes shining to say: "I've just seen the most wonderful thing in the world—dozens of milk bottles and newspapers on those open porches, and no one trying to steal them." Can you imagine what that meant to one who for years had had to be alert every moment of the day and night to protect her pitifully meager possessions?

No human government can achieve a workable combination of these two essentials—freedom and order—unless the great majority of citizens are inherently honest and law-abidding. As William Penn said over 250 years ago: "Those men who are not governed by God must be ruled by tyrants."

Present Business Standards High

But to get back to the ethical and moral standards in modern business: in spite of a continuous barrage of wild charges by left-wing columnists and radio commentators, and accusations by politicians against many companies or even whole industries, I am sure from my own experience that the ethical standards of business generally are at an all-time high.

Admittedly before and especially during the twenties there were some freebooters in business who were taking the public for a ride, but the depression weeded them out pretty fast, and the Securities and Exchange Act has kept the climate rather unhealthy for crooks ever since. Of course, we deserve no laurels for merely obeying the law. However, the ethical standards presently acceptable to the business community substantially transcend those set even by our newer laws. As the result, the SEC has had very little occasion to prosecute any substantial company or important individuals under that act, even on technicalities.

One of the things that has surprised me in my management experience is the tremendous amount of business that is done every day—often involving huge sums of money—on the mere verbal agreement of two men who have confidence in one another. True, many of the deals are later reduced to writing as a matter of corporate record, but by the time the lawyers get through dotting the i's and crossing the t's the agreement has often been carried out in full.

High moral standards do exist and must exist to make possible the efficient production and distribution of 400 billion dollars worth of goods and services annually in this country. Fraud and commercial bribery, so common in many countries, are almost nonexistent here. On the much-maligned stock exchange, billions of dollars in goods and property are exchanged by a word or a sign. The same is true among bankers. Our own company's credit sales total over $1,300,000,000 per year to well over one million different individual and corporate accounts, yet our bad-debt losses over the past five years have averaged not one percent, not one-tenth of one percent, but actually about one-fortieth of one percent! Think what that means to the cost and efficiency of doing business in this country.

Why the Increasing Government Attacks on Business?

But if what I say about ethics in modern business is true, why is it that our Government has over the past two decades filed so many hundred suits of one sort or another against large corporations or even whole industries? It is said that in England they knight their leading businessmen—over here they indict them! And that's really not funny. These attacks and their effect on public opinion give serious concern to everyone who takes pride in the high standards of modern business. How can such actions be accounted for if businessmen are really honest?

One reason is, of course, that our Federal bureaucracy has for many years been overrun with so-called bright young men who are 100 percent for the planned economy. As part of a studied campaign to substitute social-

ism for free enterprise they want to discredit private business management if they can. They use their positions to create dissension between government and business, to spread fallacies regarding business, and to harass business with complicated and conflicting regulations and litigations.

With the death of the OPS about three years ago, business got rid of 1,600 orders using a total of over 3,000,000 words.

The Manufacturers' General Ceiling Price Regulation, known as CPR 22, including its 33 supplementary regulations, covered a total of 206 pages, or about 221,000 words.

Some laws and regulations go to the opposite extreme of intentional vagueness so that no one can tell what is legal. As Lowell B. Mason, Federal Trade Commissioner, has said, the legality or illegality of any price now "rests not on law, but on the whim of bureaucracy." Mr. Mason ought to know. Justice Jackson of the Supreme Court said in a dissent, "The law of this case, in a nutshell, is that no quantity discount is valid if the Commission chooses to say it is not." Businessmen must guess, at their peril, what the law is supposed to be at any given moment. One law—the Sherman Act, which most industrial leaders welcome as a necessary part of American competitive enterprise—bars agreements in restraint of competition. The resulting absence of cartels is one of the principal reasons for our rapid industrial progress. But now we're getting more and more laws and commission orders that sharply limit the ways in which we can compete. The idea seems to be that we must compete, but that no one must be hurt or lose any business in the process! The public interest cannot be served by such "soft" competition.

In view of all these facts, I trust you will agree that governmental attacks or suits by no means disprove the existence of high ethical standards in business.

Relations with Employees and the Public

Being honest and law-abiding does not, of course, comprise all the ethical aspects of business conduct. In relations with employees, great progress has been made in the last generation. There are still sharp differences of opinion between management and some unions regarding the merits of featherbedding practices, the compulsory closed shop, or of runaway wages for favored groups which are ruthless in exerting their economic pressure against the public. However, when it comes to the ethical questions of honor and fair dealing, industry's record is at an historic high. In the fulfillment of contracts, written and unwritten, between capital and labor there is no doubt in the public's mind as to which one keeps the better faith. Yet from some labor publications there is as much villification as ever. This is not because labor leaders are such immoral fellows, but because they follow the philosophy that "the squeaky wheel gets the grease," which has worked so often and so well for them in the past.

Progress still is to be made in human relations in our plants, but the strides of the present generation of management have been too great to require any apology at the public bar. I wish some business critics could sit in at one of the earnest discussions in N.A.M. board and committee meetings looking toward the solution of some of the problems of industrial health and safety, the hiring of minority groups and handicapped workers, benefit plans, steady employment, etc.

It is on the business people that almost every community today relies largely for leadership in civic affairs, including moral backing and financial sponsorship. The responsibility that business assumes toward the community is exemplified every time there is a local disaster or a really worth-while community project. Politicians often out-promise businessmen, but when it comes to performance, the businessman is the one to count on.

Reasons for the High Standards in Business

It may be of interest to appraise the factors which have been steadily improving business ethics at a time when moral standards in several other parts of our economy have apparently been deteriorating. I do not think that businessmen can take entire credit for the development, even though they are justifiably proud of it. To my mind the principal effective factors have been these:

1. The depression exposed and eliminated many whose standards had been inadequate, and posted many conspicuous warnings for the present business generation.

2. Public sentiment, demanding the highest standards of conduct for those handling or administering other people's money, made itself felt not only by legislation, but also by insistence that only men of proven integrity be placed in responsible business or financial positions.

3. Business can be carried on far more effectively and promptly when honorable men are dealing with one another. Life is too short to maintain an adequate guard against a person whose integrity is doubtful, so one simply avoids dealing with him. If a business is to grow and prosper, it must be firmly rooted in fair dealing.

4. Most men attain the leadership of our large corporations today by a long process of step-by-step promotion in competition with others. As Dr. Copeland of Harvard says in his recent book, "Because of this continual sifting process, it is rare that a man attains a high executive position in a well-established company who does not measure up to a high standard of conduct."

5. Most of today's managers of our larger industries and businesses are essentially professional men rather than owners. They are able to balance objectively the proper claims of the three groups who must be joined as a team to make a continuous success of any business—namely, stockholders, employees, and customers. They know that if business is to retain the freedom essential to its success, it must conduct itself so that it deserves and wins the confidence of the public.

6. The reasons for the high standards of business ethics in America would be sadly incomplete if tribute were not paid to the two greatest factors in the whole moral climate of America—namely, the influence, throughout our history, of our churches and colleges. . . . They have done more than all the others put together to create and preserve our great American traditions of personal integrity and individual freedom. The Golden Rule, taught by the church for nearly 2,000 years, is still the best guide for business ethics and personal conduct.

One Point of Criticism

While I am sure American business ethics deserve far more acclaim and less attack than they have been receiving, I feel there is one point on which we businessmen can properly be criticized, and that is with respect to lack of courage in leading the fight against both dishonesty and demagoguery in city, state, and nation. We have sometimes sneered at the "do-gooders" and then vainly called for the police when the "do-badders" took over. This is

(Continued on page 92)

Materials Handling — The Common Denominator in Automation

By 1966 industrial production is forecast to be up 47%. This increase will have to be turned out by only 4% more production workers than in 1956, working shorter hours. To achieve this goal, productivity per worker will have to increase as much as 50% in the next ten years.

WE OFTEN hear people in industry today speak of automation and the automatic factory as the answer to the need for increased productivity by today's labor force.

Closely examining these new manufacturing concepts, material handling is found to be an essential part of them. The most frequently used definition for automation is "continuous automatic production." The flow of materials through the manufacturing plant by modern material handling methods provides this essential continuity. Without well-planned material handling methods, automation or automatic production cannot be achieved.

Keep in mind that material handling is not only for the automated factory, or for large industries alone. Material handling problems are found in every facet of American industry.

Crude physical effort is still being used in too many places for pushing and pulling, lifting and setting down, bringing in and taking out. And yet, these handling operations add not one cent to the value of the product.

An analysis of manufacturing operations in many plants has shown that material handling is responsible for about 25% of the total cost of the product. Measured another way, material handling consumes almost 40% of the total labor cost.

Since non-productive material handling operations represent such a large part of the product cost, the use of modern electrically-powered material handling equipment offers immediate cost reduction possibilities. These opportunities are immediately evident when you consider that human muscle power expended on material handling costs $10 per horsepower hour. Electricity is always ready to work for only a few cents per horsepower hour, releasing workers for more useful jobs.

Whether the business has simple material handling problems, or is a large, highly mechanized factory, electrified material handling means "dollars in the till" and these benefits:

1. Upgrading manpower.
2. Increased production.
3. Better utilization of plant facilities.
4. Inventory reduction.

For instance, these applications of simple material handling equipment will illustrate how benefits can be obtained:

A conveyer system moves heavy bags into a boxcar. Four men loaded 800 bags into a boxcar in one hour, compared to the three hours it formerly took the same four workers to load. Fewer hours are needed for loading operations, releasing the workmen for more productive work.

Elimination of manual handling between work stations by use of electric conveyers or other equipment means that hands used for production are not hauling. Machines may be kept busy and important machine hours gained by proper application of good material handling practices to provide a continuous flow of parts.

An improperly used warehouse becomes a confusion of boxes, crates, cartons, wasting warehouse capacity and efficient movements of materials in and out is almost impossible. The use of electric cranes and trucks provides for orderly storage, making good use of vertical space, warehouse capacity and operating efficiency is increased.

A small electric fork truck, for example, designed to work in narrow aisles, enabled a plant to utilize five additional feet on each of seven aisles in a building. This added 3500 square feet of floor area thus made available for storage purposes and eliminated the need for a new warehouse.

Conveyors are a valuable tool for production and inventory control. The capacity of the conveyor establishes a definite limit on the amount of in-process inventory that can accumulate. It forces the flow of material from one work station to another, avoiding unnecessary accumulation of inventory on the factory floor.

The important consideration about automatic electric handling operations is that the job can be done for fewer dollars, and that men who might otherwise spend their time performing repetitive tasks that contribute nothing to the value of the product, are released for more productive work.

How can you get started on improving material handling operations in your plant or business? One approach is based on progressive steps with a basic concept that can be applied to handling operations anywhere in industry.

First, all movement of material in the plant operation, at receiving, between machines, at assembly, in stock rooms, at shipping and even in the freight car, should be critically analyzed and placed in one of these three areas:

1. The manual area, which embraces hand operations and hand equipment.
2. The mechanization area, which includes trucks, conveyors or transfers.
3. The automation area, in which material handling integrates with processing equipment.

The second step is an objective appraisal of every material handling operation to determine if it would be economically sound to make the necessary investment to move the operation up to a higher stage of development.

Good material handling is receiving increased attention in manufacturing operations. An automation program to upgrade material handling in your plant can be easily started. Equipment specialists and your electric utility company power sales and industrial engineers are available to help with your problem and equipment needs.

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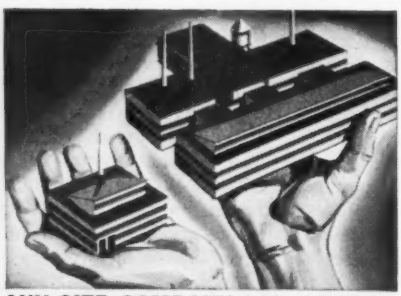
LOST: One leg
SAVED: One man

(A LIBERTY REHABILITATION STORY)

In Arkansas a one-ton boulder dropped on a worker's foot. Then followed a long, painful time of trying to save his badly crushed foot. About nine months after the accident, despite expert care, his leg had to be amputated. This was a dark moment, but the brighter part of his story began soon when he left for Liberty Mutual's Rehabilitation Center. The man from Arkansas was a good patient, eager to use his new artificial leg, eager to get the most from the Center's expert therapy. In three weeks he left the Center. Back at work, it wasn't long before he was promoted to boss on the "graveyard shift." In a night he'll now walk more than six miles on the job, up ladders, over fallen rocks and debris. He's a good example of Liberty Mutual Rehabilitation — part of Liberty's Medical and Health program that helps reduce compensation insurance costs and saves good men for America.



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NEWS FORUM

This department includes a digest of news and comment about Connecticut Industry of interest to management and others desiring to follow industrial news and trends.

TO HONOR New Departure Division of General Motors Corporation on the occasion of its fiftieth anniversary in the field of ball bearing manufacture, the Manufacturers Association of Connecticut recently awarded the Division a citation. The presentation was made by Harrison Fuller, MAC vice president, and president of Fuller Merriam Co., West Haven, at the GM Division's Connecticut anniversary dinner held at the Statler Hotel in Hartford on September 11.

In presenting the award to Paul W. Rhame, the Division's general manager, Mr. Fuller pointed to the importance of New Departure products to people all over the nation, and throughout the world. "That fact, of course, makes the people of Connecticut proud and happy," Mr. Fuller said, "particularly when they contemplate the contribution that New Departure makes to the welfare of their state."

Principal speaker at the dinner, as well as at a similar function in Sandusky, Ohio two nights later, was Sherrod E. Skinner, GM vice president.



HARRISON FULLER, MAC vice president, presents citation to officials of New Departure Division of General Motors Corporation on the occasion of the division's 50th anniversary in the ball bearing manufacturing field. Left to right, Sherrod E. Skinner, vice president of General Motors, Paul W. Rhame, general manager, New Departure Division, and Mr. Fuller.

The Cover



THIS MONTH'S cover photo was taken at Yale Dining Hall during the evening session of the Association's 1956 annual meeting. Over 700 Connecticut industrialists and guests were present.

Discussing the subject, "New Departures for Industry and Education," Mr. Skinner's talk sharply pointed up the needs for training more scientists and engineers to cope with our constantly expanding standard of living.

A week-long program of events including dinners, stage shows and open house activities marked the important milestone in the history of the Division. Close to 8,000 employees, members of their families and friends viewed operations of the ball bearing plants in Bristol and Meriden during the anniversary celebration.

★ ★ ★

ELLIS C. MAXCY has been elected to the newly created office of administrative vice president by the directors of The Southern New England Tele-

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phone Company. He was also elected a director of the company.

Douglas W. Loring was elected personnel vice president, the position held by Mr. Maxcy. Donald P. Collins of Madison becomes assistant vice president in the personnel department and will be succeeded by Robert W. Heubner of West Haven as general plant personnel supervisor.

The directors also declared a quarterly dividend of fifty cents per share on the company's capital stock.

★ ★ ★

DOMAN HELICOPTERS, INC., Danbury, has shipped one of its model LZ-5 eight-place helicopters to Europe for flight demonstrations to European Government and business interests. The helicopter will be demonstrated as a result of requests to Doman officials who recently made a trip there to determine sales possibilities in Europe for the helicopter.

The model LZ-5 is the commercial version of the YH-31 which is on order at Doman for delivery to the U. S. Army. The first YH-31 was delivered to the Army in May and has recently completed User Evaluation Tests conducted by the Army at Fort Rucker, Alabama.

★ ★ ★

THE APPOINTMENT of Dwight E. Harris as chief engineer and head of the company's recently expanded development and product application department has been announced by Lux Clock Manufacturing Co., Waterbury.

A graduate of Worcester Polytechnic Institute with a Mechanical Engineering degree, Mr. Harris was formerly chief engineer with Winchester Electronics, Inc. He holds several patents on solenoid valves and has patents pending on a hydraulic servo control.

★ ★ ★

THOMAS I. S. BOAK, president of the Plume & Atwood Manufacturing Company, Thomaston, has announced the appointment of Paul R. Curtis to direct a new division created to provide special services to the users of cosmetic containers.

Mr. Curtis is well acquainted with the needs of the cosmetic industry having been associated with the market for a number of years. In the latter half of the 1940's and early 1950's he was with Plume & Atwood as a sales representative selling to the cosmetic trade. He has also represented the Plax Corporation in Hartford merchandising a complete line of flexible plastic containers. He has most recently been sales manager for the Sun Tube Company promoting the sales of collapsible metal tubes.

★ ★ ★

DOUGLAS H. THOMSON, president of Gabb Special Products, Incorporated, Windsor Locks, has announced the recent incorporation of the company and the naming of Robert E. Giauque as manager. He was formerly with the Horton Chuck Division, Greenfield Tap & Die Corp. as general works manager and chief engineer.

Paul L. LeFebvre of Springfield has recently joined the sales department of Gabb and will handle sales for the firm.

★ ★ ★

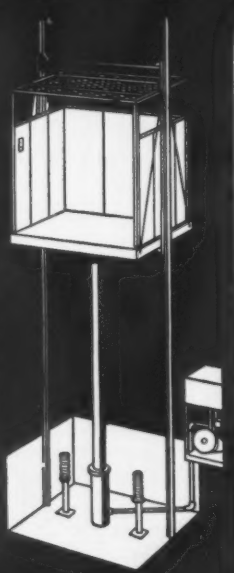
A NEW compact catalog on milling cutters has been published by The Viking Tool Company, Shelton, butting tool engineers and manufacturers.

Described as completely new from cover to cover, the catalog has separate sections for high speed steel and carbide cutters. Especially noteworthy is the breakdown of each section of the catalog into light, medium and heavy duty cutters. Cuts up to 5/8" depth of cut in steel are possible with the new extra heavy duty carbide face mills and end mills. A section of engineering specials is also included to explain the potentials possible in the Viking inserted blade cutter line.

★ ★ ★

OWEN W. HARRISON has been appointed eastern regional sales manager for The Holo-Krome Screw Corp-

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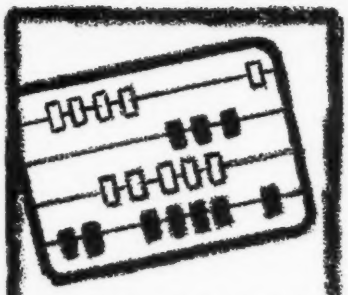
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oration, Hartford. Mr. Harrison, who began his career with the company as a sales representative in 1941 was formerly sales representative in the northeastern Ohio territory. He will continue to reside in Cleveland.

In announcing the appointment, R. A. Modig, vice president in charge of sales for Holo-Krome, pointed out that the new position was established as a result of steadily increasing sales of the company's socket screw products and a sales force expanding in all sections of the country.

★ ★ ★

TWO CHANGES that affect the sales staff of Whitney Blake Company, New Haven, have been announced by John Brown Cook, president.

Wesley C. Bunnell has been promoted from assistant sales manager to sales manager and Harold L. Gobeille has been given the responsibilities of advertising and sales promotion manager in addition to his duties as field supervisor.

★ ★ ★

THE WATERBURY BRASS GOODS Division of The American Brass Company has officially changed its name. It is now the Fabricated Metal Goods Division, a name said to be more descriptive of present day operations. This division manufactures specialties from flat or sheet metal, particularly products of small size and close tolerance. The announcement was made by John A. Wright, vice president in charge of the division.

Organized as the Waterbury Brass Goods Corporation in 1904, the company combined manufacturing operations of two of The American Brass Company's predecessors—Benedict & Burnham Co., and Holmes, Booth & Haydens Co. The late John A. Coe, Sr. was its first president.

★ ★ ★

ROBERT E. COOPER, JR., of Chicago, has been elected president of The E. Ingraham Company, Bristol, according to an announcement by Edward Ingraham, chairman of the company's board of directors. Mr. Cooper becomes the first president in the 125 year history of the clock and watch company who is not a member of the Ingraham family.

Mr. Cooper takes over the Ingraham presidency after 23 years with Montgomery Ward & Company in Chicago. For the past four years he has been home furnishings merchandise manager

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for the Chicago company, administering the merchandising functions of twelve of Montgomery Ward's divisions, including major appliances, furniture, TV, radio, toys, jewelry, drugs, stationery, floor coverings, and others.

He attended the University of California. In World War II he served with the U. S. Air Force, establishing buying offices for the Army in New York and San Francisco, and later serving as inspector general for the Western Flying Training Command.

Dudley S. Ingraham, former president, was elected vice chairman of the board of directors of The E. Ingraham Company and he continues as president of E-Town Time Corporation, an Ingraham subsidiary in Elizabethtown, Kentucky and Donald G. Holmes continues as president of Ingraham Canadian Clock Company, Ltd. of Toronto, Ontario, Canada, another subsidiary. Other company officers were re-elected.

★ ★ ★

HIGH-SPEED self-balancing recording potentiometers for use with analog-to-digital conversion devices have recently been announced by The Bristol Company of Waterbury. Designed to give full-scale traverse in 0.4 seconds, the electronic Dynamaster can be equipped with most of the standard digital read-out devices presently available.

Round chart models are also available, and various pen speeds can be supplied, depending on the speed requirements and type of converter used.

★ ★ ★

TO EXPAND new product service facilities, MacDermid, Incorporated, Waterbury, recently appointed Claude E. Weekly to the newly created post of product service engineer.

Under Mr. Weekly's guidance, MacDermid product developments, originating in the company's research laboratories and tested in the new customer service laboratory, will be tested under production conditions in customer's plants.

Mr. Weekly has been active in all phases of metal finishing as foreman, supervisor of finishing rooms, metal finishing consultant and service manager. Prior to joining MacDermid he was with Promat Division of Poor & Co.

★ ★ ★

A NEW SERIES of "Diamond H" thermostats for range oven, industrial and air conditioning applications has been developed and is being marketed by The Hart Manufacturing Company, Hartford.

Said to be extremely compact, the new thermostat line, designated Series 270, includes a wide range of models, all simple in design and rugged in construction to assure long, dependable service life, as well as accurate calibration, quick action and consistent, low differential operation.

Industrial models are designed for such applications as laboratory equipment, platens, steam tables, oil baths, grease kettles, coffee urns, blueprint machines and many others.

★ ★ ★

A PATENT covering a method of instantly demineralizing tap water has been issued by the U. S. Patent Office to Samuel I. Ward, president of Crystal Research Laboratories, Inc., Hartford. The trade name for the device is the Crystalab Deeminac. The method utilizes two squeezable type plastic bottles —one fills with water—the other contains Deeminite, the ion exchange resin filtering medium. Only deionized water



FIELD SALES REPRESENTATIVES of Flexible Tubing Corporation attending the Guilford company's annual sales conference recently were given a preview of further expansion of the company's plant by Frederick K. Daggett, company president.

can pass through the filter, since the minerals and salts are entrapped ionically by the resins. When the filter becomes exhausted, a color change is noted.

Mr. Ward's latest invention in the demineralizing field is the Deemajet, a one gallon polyethylene container filled with ion exchange resins. This is a low cost, high capacity unit that has been created to fill the increasing demand for larger quantities of deionized water. It is water pressure operated, connects to an ordinary faucet, and will process water to a high ionic purity at a rate as great as two gallons per minute.

★ ★ ★

SAFETY INDUSTRIES, INC., Hamden, has announced the election of Alexander D. Bruce to its board of directors. He is president of Vapor Heating Corporation, Chicago. He fills the vacancy recently created by the resignation of J. H. Michaeli, retired former secretary and treasurer of the company.

★ ★ ★

ENTHONE, INC., New Haven, has announced a marketing program designed to increase its service to its customers in the New England–Middle Atlantic states area. In the first phase of the program, Derick S. Hartshorn, Jr. has been promoted from sales and service engineer to district manager of the New York City, Westchester and Long Island area.

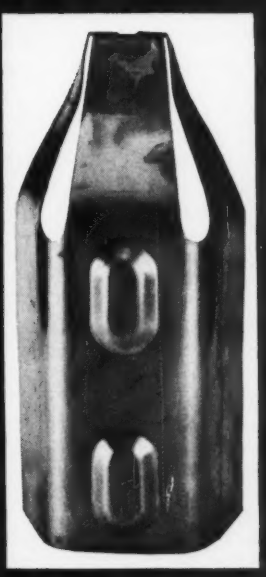
In his new capacity Mr. Hartshorn will be in charge of all sales and service work and personnel in his area. He will also be available personally for service and consultation whenever customers in the area require it.

★ ★ ★

A NEW valve-in-head, compact four cylinder vee type engine designed for all general applications in the industrial agricultural and construction fields was announced recently by S. B. Withington, president, Lycoming Division, Avco Manufacturing Company, Stratford.

Designated as the model CV4-180, the engine delivers 70 horsepower at 3000 rpm. It is said to be the first air cooled engine to meet this industrial field challenge.

The new four-cylinder engine features the proven design and interchangeability of major component parts with its counterpart, the C2-90 model 30 horsepower engine, such as the



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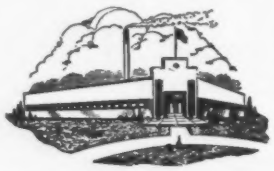
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★ ★ ★

HILDRETH PRESS, of Bristol, continuing to expand its facilities for long-run publication and commercial printing, has recently completed the installation of a five-color sheet-fed Cottrell rotary press for printing catalog inserts, direct-mail advertising pieces and magazine covers; a 64-page Goss two-color web rotary publication press and a combination wrapping and mailing machine.

All three high speed units are already in production and persons interested in viewing their operation may make arrangements to do so, according to Nelson E. Strong, Hildreth's New England sales representative.

★ ★ ★

THE PURCHASE of the Floyd Cranska Thread Co. of Moosup by the Griswold Rubber Company, Jewett City, has been announced.

Wayne D. Bradley, president and general manager of the rubber company said that Griswold and an affiliate, the Rhoades Rubber Company, will use the Moosup space for expansion of their rubber manufacturing operations.

★ ★ ★

SEVENTY-FIVE percent of the Perkin-Elmer employees eligible to purchase common stock under the company's recent offering have elected to do so, according to Samuel S. Cross Jr., general counsel and secretary of Perkin-Elmer Corporation, Norwalk.

The offering, approved by the Corporation's stockholders early in July, was made to 508 employees. Of this number 371 indicated their desire to purchase stock.

★ ★ ★

THE J. H. SESSIONS & SON COMPANY, Bristol, has recently published a new illustrated file and facilities folder on stampings and assemblies. This folder, which was designed to slip into a file drawer contains information on standard and special stampings, assemblies for the finished product and the facilities available at the J. H. Sessions & Son Company. The folder is available upon request.

★ ★ ★

GEORGE A. McLACHLAN, a leading figure in the hat industry for a half century, died recently at his home in Danbury.

He was founder and president of George McLachlan & Sons, Inc. and McLachlan Hats, Inc., South Norwalk.

Mr. McLachlan began his career in the hatting trade at the age of 13 in his brother's factory. When he was about 25 he formed his own hat manufacturing business, producing fur felt hats in the rough. Some 15 years ago the company was expanded into the manufacture of finished hats.

Mr. McLachlan was a member of the McGivney Council, Knights of Columbus, the Danbury Club, St. Andrew's Society of New York, the Lambs Club and the Canadian Club, also of New York.

He is survived by two sons, four daughters and 21 grandchildren.

★ ★ ★

FARREL-BIRMINGHAM COMPANY, INC., of Ansonia has announced the sale of the company's "Modern line" of small tools manufactured at its Rochester plant, to Jones and Lamson Machine Company of Springfield, Vermont.

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Farrel-Birmingham's desire to emphasize production of its heavier line machine tool equipment with all facilities at the Consolidated Machine Tool Division in Rochester, resulted in the decision to sell the "Modern line."

★ ★ ★

OLIVER PEACE, vice president in charge of manufacturing of the Humason Mfg. Co. of Forestville, a subsidiary of the Stanley Works, died recently.

A native of England, Mr. Peace first joined Humason in 1914 as a machine operator and advanced through the ranks to foreman, superintendent and then to the position held at the time of his death.

★ ★ ★

A SUGGESTION AWARD of $1,388, the largest such award ever issued by the suggestion committee of the Burndy Engineering Company, Norwalk, was presented to James Evon at a special ceremony held recently.

Mr. Evon, who is employed by Burndy as a development technician, suggested an improvement in a fuse-type aircraft limiter used in supersonic jet bombers and fighters.

★ ★ ★

AN ANNOUNCEMENT has been made by Carlyle F. Barnes, president of the Associated Spring Corporation, Bristol, of the appointment of Charles J. Stofko as general manager of the Barnes-Gibson-Raymond Divisions at Plymouth and Ann Arbor, Michigan.

Mr. Stofko joined the Wallace Barnes Company Division in 1929 and in 1953 was named factory manager of the Steel and Spring Divisions at the Wallace Barnes plants in Bristol.

★ ★ ★

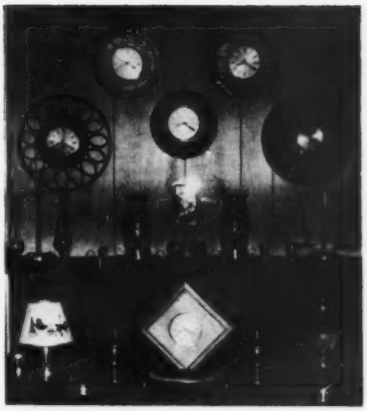
ALPHONZO B. PORTER, who has been associated with the G. E. Prentice Manufacturing Co., Kensington for more than 43 years, has retired from his post of chairman of the board of directors.

Daniel F. Porter of New York has been elected to replace his father on the board of directors.

Mr. Porter joined the company in 1913 as secretary and treasurer, and has served as chairman of the board for the past twelve years.

★ ★ ★

THE FORMATION of a jointly owned company to produce primary aluminum has been announced by Olin Mathieson Chemical Corporation and Revere Copper and Brass, Inc.



THESE ATTRACTIVE gift items have been added to the line of Plume & Atwood Manufacturing Company, Thomaston. Manufacturing and distribution rights for the new gift line were acquired recently by the company from Wasley Products, Inc., Plainville.

The company is to be called the Olin Revere Metals Corporation. Its president will be Walter F. O'Connell, who will also continue as executive vice president in charge of Olin Mathieson's aluminum program.

The new corporation offers Olin Mathieson the advantage of a greatly increased supply of primary aluminum for its fabricating facilities at a significantly lower cost per ton.

The facilities of Olin Revere Metals Corporation will include an aluminum plant with a capacity of 350,000 tons per year to be built on a site still to be selected near the Gulf Coast on deep water transportation, and a reduction plant with 180,000 tons per year capacity, now under construction near Clarington, Ohio.

★ ★ ★

A NEW PROCESS for producing synthetic rubber latex has been developed by The B. F. Goodrich Sponge Products Division, Shelton.

The process makes it possible for synthetic rubber producers to manufacture an improved, high solids content latex much more rapidly than any previously known method, according to F. M. Daley, division president.

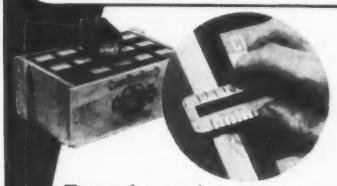
Mr. Daley revealed that the process was invented by Leon Talalay, technical director of Sponge Products' Texfoam Division. The raw material for the process is a small particle size but low solids content latex similar to that now produced by the synthetic rubber industry in making general purpose

Here's Why

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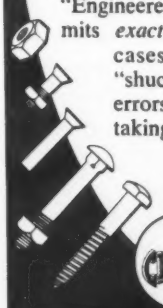


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rubber for tires and for other rubber products.

The small particles of the low-solids-content latex are converted to large particles by an instantaneous method known as "freeze agglomeration." This allows the latex to be concentrated to a fluid product of high solids content and "excellent" properties particularly suited to the manufacture of latex foam rubber for upholstery, bedding and other uses.

★ ★ ★

THE DOW CHEMICAL CO. has embarked on another round of "vigorous expansion" and expects to spend considerably more than $75 million in the current fiscal year ending next May 31, Dr. Leland I. Doan, president, has revealed.

A spokesman at the Allyn's Point, Connecticut plant said that the total includes allocations for expansion of sytrofoam and styron plant facilities there.

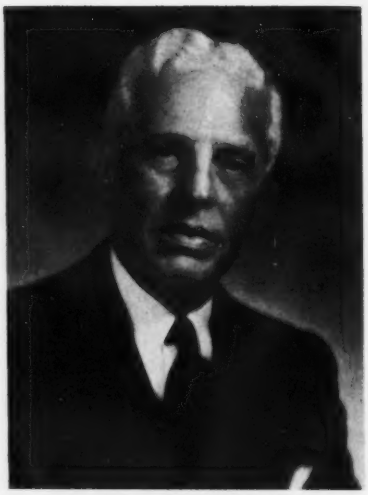
★ ★ ★

GEORGE L. BARTON, consulting engineer, has been appointed manager of special products sales for the Greist Manufacturing Company, according to an announcement by Merritt D. Vanderbilt, president.

For the past two years Mr. Barton has been president of his own firm, the Barton Service Corporation.

★ ★ ★

DONALD C. COTTRELL, president of The Cottrell Co., Pawcatuck, and a director of the Manufacturers Association of Connecticut since January 1953, died recently at Westerly Hospital.



DONALD C. COTTRELL

Mr. Cottrell had served as the president of The Cottrell Company and its predecessor, the C. B. Cottrell and Sons Company, printing press manufacturers, since 1949. He had spent all but twelve years of his business career since 1915 with the firm.

A native of Westerly, Mr. Cottrell attended St. Mark's school and was graduated from Harvard University in 1915. During World War I he was a captain of Co. D, 304th Infantry of the 76th Division. At the end of the war he joined his family's firm and then left in 1920 for positions with United Drug Company in Boston and later Sanderson and Porter, engineers, and the Guaranty Company of New York.

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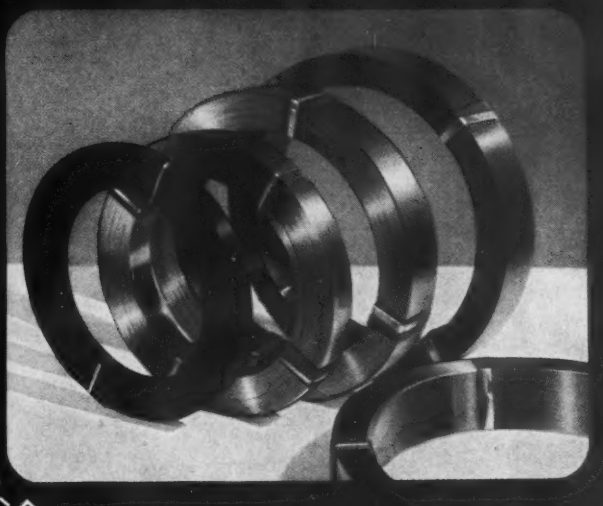
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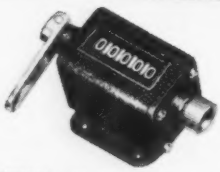
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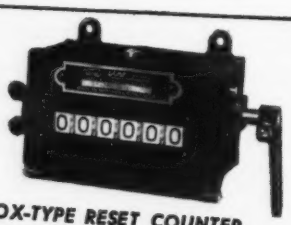


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A compact, rugged reset counter for moderate duty in parts inspection, quality control, conveyors, machine tools, light presses, etc.

Dimensions: 1¾" long, 1 13/64" high, 1 7/16" wide

Speed: Up to 1000 counts per minute.



BOX-TYPE RESET COUNTER

For punch press installations, conveyors, metal-working equipment, die casting, plastic-molding, rivet, spring and wire machining, or any installation requiring a heavy duty counter.

Dimensions: 4¼" long, 2 21/32" high, 3⅜" wide.
Speed: 500 counts per minute.

RESET MAGNETIC COUNTER

For remote indication of machine operation from plant to office.

Dimensions: 3 15/16" long, 2½" high, 1⅝" wide.

Speed: Up to 1000 counts per minute.

Coils: 110V-AC are standard. Other voltages are available. Panel mounting feature also available.



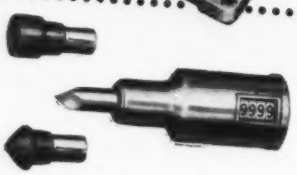


HAND TALLY

For quick spot-checks of production or performance.

Dimensions: 1 17/64" long (to end of reset knob), 1¾" deep, 2" high.

Counts one for each depression of the thumb lever, and resets to zero by a turn of the knob.



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For checking to make sure that the machine is operating at the required R.P.M.

Dimensions: 3¼" long, ⅜" max. diameter. Non-Reset.

Internal clutch operates counter only when rubber tip is pressed against the shaft.

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or write us on special problems

In 1932 he rejoined the C. B. Cottrell and Sons Company and spent several years in the company's New York, Chicago and Milwaukee offices.

He was a director of the National Printing Equipment Association and the Washington Trust Company. He was also a trustee of the Westerly Hospital and of the Westerly Library Association, and was vice president of the Stonington Welfare League and treasurer of the Stonington Improvement Association.

Mr. Cottrell's survivors include his wife, a son and two daughters.

★ ★ ★

GEORGE ULLRING has been named assistant sales manager of the Allen Manufacturing Company, Willis D. Horner, Sales manager, has announced.

Mr. Ullring has been Allen's sales representative in the Cleveland and Pittsburgh area for 20 years.

★ ★ ★

THOMAS J. TURNER has been named director of Customer Relations at Colt's Patent Fire Arms Co., Inc., it has been announced by Fred A. Roff, Jr., vice president.

Mr. Turner has been employed at Colt's for 15 years and is being promoted from assistant to the general sales manager.

★ ★ ★

ALEXANDER H. d'ARCAMBAL retired as president and general manager of the Pratt & Whitney Company, Inc. on November 1. He will remain active in company affairs in a consulting capacity and as honorary chairman of its Board of Directors.

L. D. Silberstein, chairman of the company's Board of Directors and Board chairman of Penn-Texas Corporation, of which Pratt & Whitney is a subsidiary, has announced that Edward P. Gillane, executive vice president, will succeed Mr. d'Arcambal as president.

Mr. d'Arcambal joined the Pratt & Whitney organization in 1919 as its chief metallurgist. He rose rapidly through its executive ranks becoming president and general manager of the company in 1954. During his 37 years of association with the company Mr. d'Arcambal developed many processes which gave Pratt & Whitney industry leadership. In 1920 he devised a means of multiple tempering all Pratt & Whitney high speed cutting tools which later became common industry practice. Through his development of

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ALEXANDER H. d'ARCHAMBAL



EDWARD P. GILLANE

a process of producing on a production basis, many types of high speed cutting tools with a special surface hardening treatment, Pratt & Whitney became a leader in this field also.

Mr. d'Arcambal is a native of Kalamazoo, Michigan, and a graduate of the University of Michigan. In 1940 he was one of two members of his class at the University who were honored by special citations, presented for "outstanding work in chemical and metallurgical engineering."

During his long career in the metal working industry he has taken an active part in industry affairs and in the activities of many of its related associations. He has been national president of the American Society for Metals and national president of the American Society of Tool Engineers. He has also been active in the National Machine Tool Builders' Association, the Society of Automotive Engineers, the American Society for Quality Control and the American Institute of Mining and Metallurgical Engineers.

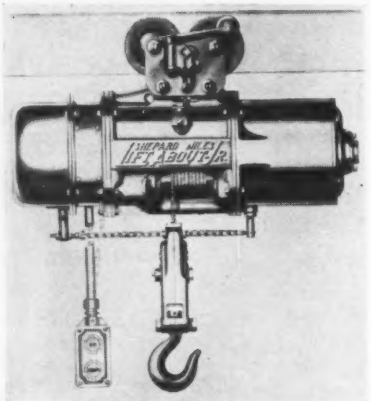
Mr. Gillane was associated with the Underwood Corporation in Bridgeport for 27 years before joining Potter & Johnston Company of Pawtucket, Rhode Island in 1948 as its vice president and controller. He was named vice president and general manager of Potter & Johnston in 1950 and president and general manager in 1955. In June 1956 he was elected executive vice president of Pratt & Whitney Company, Inc., of which Potter & Johnston is a subsidiary.

★ ★ ★

ROBERT E. CARROLL, vice president and director of Arrow-Hart & Hegeman Electric Co., Hartford, has been named general chairman of the National Resources Conference to be held at Trinity College November 26 to December 7.

The Conference will be held under the joint sponsorship of the Hartford Chamber of Commerce and Trinity College. It will be conducted by the Industrial College of the Armed Forces

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and is a condensed version of the 10-month course given in Washington. It is designed for civilians in business, education, labor and civic life as well as for Reserve Officers and highlights the interrelated military-economic problems inherent in mobilizing personnel and material resources for national security.

★ ★ ★

L. C. STOWELL, chairman of the board and chief executive officer of Underwood Corporation, retired from that position on November 1.

Mr. Stowell entered the office equipment industry 37 years ago following army service. He has occupied positions of major executive importance for the past 30 years. In 1927 at the age of 35 he was elected president of Dictaphone Corporation and left there to become executive vice president and director of Underwood in 1936. He was named president of Underwood in 1945 and chairman in 1955.

A native of Keene, New Hampshire, Mr. Stowell received his early education in Orange, Mass., attended Phillips Academy, Andover, Mass., and was graduated from Harvard College in 1914. He is a director of Dictaphone Corporation and Pitney-Bowes, Inc.

★ ★ ★

JOSEPH M. SCHAEFFER, president of The Waterbury Farrel Foundry & Machine Co. died recently after a brief illness.

Mr. Schaeffer had a world-wide reputation as an authority in the field of cold-process bolt, nut and screw machinery. He had been associated with the company for 51 years.

In 1912 he established an office in Berlin, Germany, where he was responsible for the European sales and service of Waterbury Farrel equipment. Returning to the United States at the outbreak of World War I, he continued in sales and engineering for the cold-heading division. In 1947 he was appointed chief sales engineer in charge of that division. In 1948 he was elected a vice president; a director in 1951, and president in 1954. He was a former member of the Association's Foreign Trade Committee.

★ ★ ★

FORTY-FIVE representatives of New England industrial, technical and financial management were guests of Pitney-Bowes, Inc., recently as part of the New England Council's 10th annual research and development tour.

The group was welcomed at a special luncheon in Vonderleith Hall, in Stamford, by Walter H. Wheeler, Jr., president, and heard short talks by three Pitney-Bowes executives, William F. Bernart, senior vice president in charge of engineering; John A. Strother, director of research and development, and Joseph J. Morrow, director of personnel relations.

Inspections of the company's manufacturing, research, development engineering and production engineering departments were also scheduled.

A three-day event, the tour is sponsored annually by the Council to provide New England business and industrial leaders an opportunity to study research activity in large and small companies, gain product and process ideas, learn new production techniques and confer with fellow executives, engineers, consultants and other specialists.

★ ★ ★

THE APPOINTMENT of Frank E. Beane as a vice president and controller



at first blush,
"twin weldments," too,
may appear the same . . .
until you look closely

The same basic weldment, with the same specifications, can be produced in several degrees of quality. The two weldments may generally appear to be "twins," but close scrutiny and eventual performance prove the decided difference. Avery and Saul manufactures *only quality* weldments. Through planning, flame-cutting, stress relieving, welding, finishing . . . skilled craftsmen see that the job is done correctly. Experienced personnel, fine facilities . . . and the ability to weld carbon and alloy steels, stainless steels, aluminum and copper . . . guarantee

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of Underwood Corporation has been announced by President Fred M. Farwell.

Mr. Beane, who has been serving as consultant to Bache and Company, was formerly assistant to the president of the General Chemical Division of Allied Chemical and Dye Corporation. He also served as president of the Equitable Bearing Company and as a partner in Fenner and Beane.

★ ★ ★

ACQUISITION of The Connecticut Chemical Research Corporation, Bridgeport, by B. T. Babbitt, Inc., of New York City has been announced.

A Connecticut Chemical spokesman has revealed that the Babbitt firm will not move the acquired property from Bridgeport and that production at the Connecticut plant will continue under the management of A. O. Samuels as executive head and John Schenberg as head of Bostwick Laboratories, a subsidiary.

★ ★ ★

HAROLD H. GILLESPIE, Emil J. Karkut and Raymond S. Mann have been made vice presidents of the Barden Corporation, Danbury, according to J. Robert Tomlinson, president.

Mr. Gillespie, who joined Barden earlier this year as assistant general manager, is vice president and assistant general manager. He was formerly chief engineer of the bearing branch of the U. S. Navy Bureau of Ships, Washington, D. C.

Mr. Karkut, vice president and factory manager, joined the precision ball bearing firm in 1946. He has been factory manager since June 1955.

Mr. Mann, vice president and personnel director, has been with the firm since 1945. He has served as supervisor of production control, supervisor of sales production planning and personnel manager.

★ ★ ★

HARRY I. BARTHOLOMEW, founder of the H. I. Bartholomew Manufacturing Company, Bristol, died recently at Hartford Hospital.

Mr. Bartholomew was also one of the founders of the Central Connecticut Golf Association, and director of its activities for many years.

He was born in Bristol and attended local schools. He was graduated from Yale University, Sheffield Scientific School, class of 1894.

★ ★ ★

JOSEPH W. C. BULLARD, SR., retired vice president and member of the board of directors of The Bullard Company, Bridgeport, died of a heart attack recently.

Mr. Bullard was the last survivor among five sons of Edward Payson Bullard, Sr., founder of The Bullard Company, all of whom devoted their lives to the development of the machine tool manufacturing firm.

At the time of his retirement in 1947 Mr. Bullard was vice president in charge of research. He had been a member of the board of directors since 1917.

★ ★ ★

SALES OFFICIALS of Sargent & Company have completed the nationwide introduction of a new Sargent lock line designed to meet the expand-



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At American Thread

A Company's success is largely determined by the ability of the men and women who make up the organization. American Thread has been a successful member of the Willimantic Community for 58 years, which is certainly a testimonial both to our employees and the products they make.

During this time the Company and the people on its payroll have made every effort to be good citizens—contributing to and participating in the city's growth. This series introduces some of the Willimantic citizens who help make the thread and yarn products which are among the finest made anywhere in the world.



MR. & MRS. CHASSE—Roland works for American Thread as a Dresser Tender; Fleurette as a Winder. He is the son of Joseph Chasse of Malbridge, Mass. Both Chasses are of French ancestry.





ON THE JOB — As a winder in the Shoe Thread Twisting Department, Mrs. Chasse winds supply packages for the twisters from spring supply packages from the Dye House. Roland runs the machinery that gives a glazed finish to sewing thread. It applies size and wax solutions. Heat is then used to dry these solutions or finishes. In his spare time Roland also works as a short order cook and chef at parties and wedding receptions. Both Mr. and Mrs. Chasse worked in local restaurants before joining American Thread.

DID YOU KNOW? *Willimantic Plant's 1,213,000 square feet of floor space make it the largest mill in the United States for the manufacture of thread. The area under roof is equal to eight baseball diamonds the size of Yankee Stadium or seven football fields.*



AT THE BLOOD BANK — The Chasses have contributed more than six gallons of blood to the Red Cross. Roland is on call at any time at Windham Community Memorial Hospital as a donor. From 1928 to 1933, he was also a member of Company C, 169th Infantry of the Connecticut National Guard.



"YOUR MOVE" — Mr. and Mrs. Chasse relax in their home at 18 Ash Street in Willimantic. The Chasses have two children, Robert and Evelyn. Roland's brothers, Lionel and Anthony, and his sister-in-law, Lorette, also work for American Thread.



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WILLIMANTIC, CONNECTICUT

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EVAN J. PARKER, president of The American Hardware Corporation, presented a giant padlock made by his company to G. Keith Funston (right), president of the New York Stock Exchange as a memento of the listing of American Hardware shares on the Exchange. In the center is Charles Davis, exchange member, who is a specialist in American Hardware shares.

ing needs of the medium-price hardware market, according to an announcement made by J. Bryer Duff, Sargent vice president and sales manager.

The latest Sargent lock is known as the "Sentrylock". It is said to be a uniquely designed quality lock which will be offered for use in better residential construction, in schools and in office buildings. A major feature is its simplicity of installation and the variety of functions and trim it provides.

The new lock comes in six different brass, bronze or aluminum finishes and in 16 separate models. These models are named after Connecticut towns, like Mystic, Milford, Hamden, and Darien.

Lea of Waterbury

(Continued from page 7)

composition permitted many large industrial concerns to adopt automation in buffing and polishing methods. Other Lea products developed in their own research laboratory and in conjunction with affiliates in Jamaica, N. Y. and Detroit, Mich., include bright plating processes, abrasive specialties and specialized equipment for the metal finishing industry.

Lea of Waterbury occupies the unique position of being classified as the "finishing stylists of industry." What an interior decorator does to help choose the color styling of your home and furnishings similarly Lea helps industry beautify their manufactured products. Lea methods, finishing compositions and processes are selected for the primary purpose of giving metal, plastic and wood products the type of appearance which is eye-appealing and sales worthy. Hardly a day passes without our coming in contact with some article which has been buffed, satin-finished or plated with one of Lea's numerous products or processes.

The shining chromium trim of your automobile—the satin finish on your brass window and door hardware—the silverware on your table—"milady's" gold-plated or plastic compact—the wrist watch you wear—your fountain pen—that pocket lighter—the transparent plastic comb and brush set—and many other items we see every day in homes, office buildings, trains, buses and ships, all have a surface finish most likely produced with a process developed by Lea.

Many persons who recall the Chicago World's Fair in the mid-thirties might remember the Ford Exhibit Buildings. All the outside metal trim on these buildings was satin finished with Lea Compound. When New York's Radio City Music Hall was built the decorative effect on the metal architecture in the lobby was also accomplished with Lea Compound. The new Supreme Court building in Washington, D. C. found use for the greaseless Lea Compound for finishing much of the exterior metal work. When the new streamlined aluminum train, the Bur-

lington Zephyr was built, most of the aluminum panels and trim were finished with Lea Compound.

Lea abrasive products have found their way into many unusual applications such as the cleaning of eggs, golf clubs and guns.

A patented method called "The cLEAnegg Method," uses cLEAnegg Compound on a special buff to dry-clean soiled and stained eggs. A large poultry supply dealer organization promotes its use in all parts of the United States and Canada. This method of dry cleaning eggs was recently introduced to the British Isles by Lea's affiliate, Lea Mfg. Co. of England Ltd. in Buxton. Its first public showing was at a National Poultry Show in Olympia, London, where cLEAnegg Method was given a Citation and Silver Medal Award for being a new idea of outstanding and exceptional merit. Since then the European poultry industry has recognized the many advantages of dry cleaning eggs with the cLEAnegg Method and are fast adopting its use. The complete kit is also manufactured in England.

War Contribution

How important a part Lea Manufacturing Company has played in World War II can be attested by the Army-Navy E Award received on June 27, 1944 for excellence in developing and producing a product and method for "burring" all types of ordnance parts.

Machined metal parts sometimes have slivers or burrs of metal on areas which cannot be removed by the usual machining operation. Many companies employed hundreds of people for the primary purpose of removing such "burrs" with files, emery cloth and special machining methods. Production was hampered and lags developed because of the inefficient application of such burring operations.

Lea was called upon to do something about it and succeeded in developing the "Lea Method of Burring" using Lea Compound, which helped industry overcome a tremendous bottleneck.

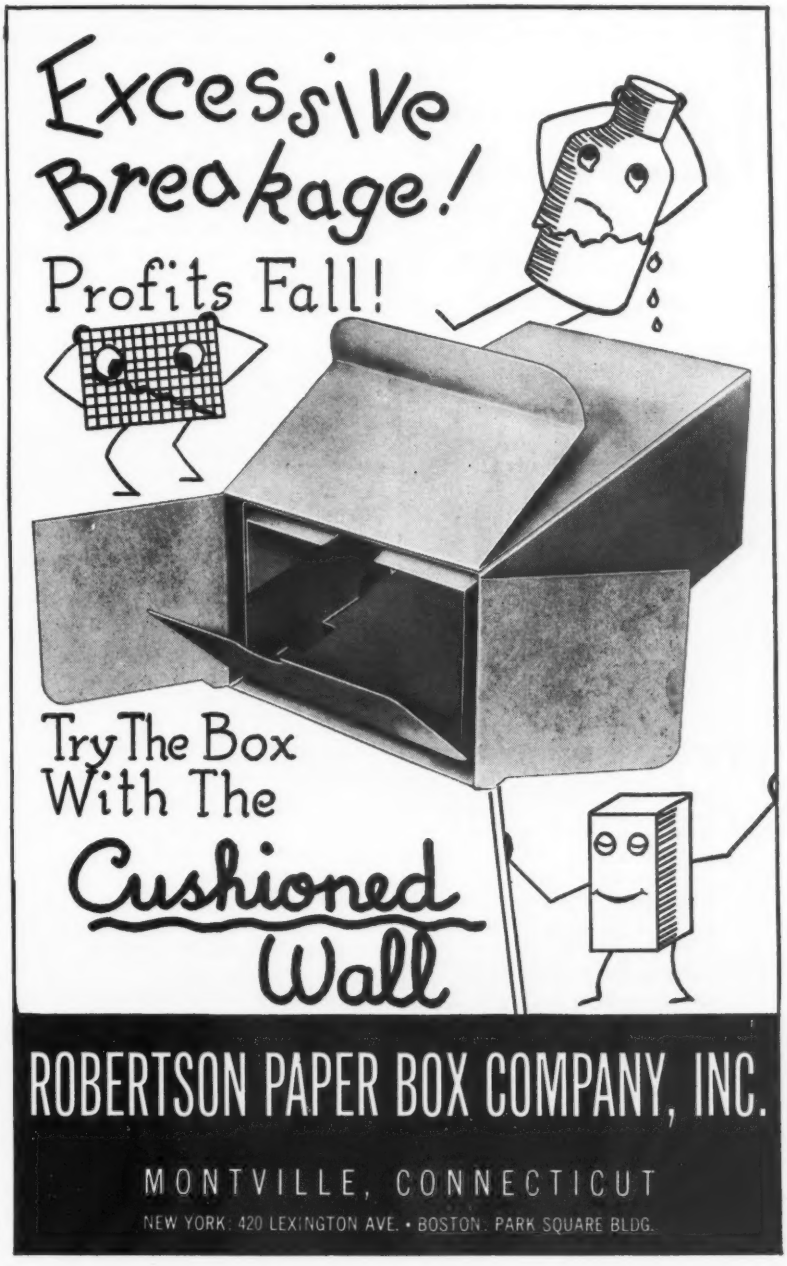
This required a switch from the decorative field to the functional usage of Lea abrasive products. However, the change-over was made without difficulty and consequently many thousands of tons of Lea Compound found their way into industry and military installations throughout the world.

Growing Pains

The company's steady growth on both nationally sold Lea products and on resale items for state and regional consumption, soon brought about another housing situation. It was not long before plans were laid for a plant of its own which is now about three-quarters completed. The new plant is located on Aurora Street in Waterbury where both truck and rail services are available at the loading platform. Three of the four projected buildings are completed and in operation. It is planned to build an office building and larger laboratory, in the next 12 months. Meanwhile laboratory and office facilities, located at 16 Cherry Avenue are continuing to function. Affiliated plants are also located in Detroit, Michigan, Scarborough, Ont., Canada, Jamaica, N. Y. and Buxton, England.

Distribution

Marketing and distribution of Lea products involves a highly specialized service to industry. Consequently, in addition to its own staff of technically





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trained metal finishing sales engineers, national sales are handled through a network of distributors employing similarly trained personnel, located in key industrial areas throughout the United States. Lea Mfg. Co. of Canada in Scarborough, Ontario manufactures and distributes Lea products throughout the Dominion. Similarly, Lea of England is now building up its sales organization throughout the British Isles and Western Europe. Exporting of Lea products to other parts of the world is done through an export agent, Gerard Kluyskens Co., New York City. Lea-Michigan, Inc., the Detroit, affiliate, and Lea Ronal in Jamaica, Long Island, complete The Lea Group.

Thus, in a generation, an idea, considered by most to be fantastic at the time, has proved sound and has been developed into a substantial and continually growing business. It is typical of many such enterprises which have built America into the most advanced industrial nation in the world.

Officers

Present officers of the company are Earle W. Couch, president and assistant treasurer; Richard P. Crane, senior vice president; Henry L. Kellner, vice president; William D. Starr, treasurer and assistant secretary, Ellsworth T. Candee, secretary; Marion G. Lynch, comptroller.

Bringing the Home Office to the Grass Roots

(Continued from page 9)

of talking directly to the ultimate consumer.

The G. Fox and Company exhibit gave some prominence, too, to a line of Stanley hand tools as well as to A. C. Gilbert trains and the Frank M. Whiting Company, silversmiths of Meriden. The big department store's main display consisted of two turntables divided into quadrants, each representing one of the four seasons. Revolving slowly, one of the turntables displayed clothing appropriate to each season; the other carried home furnishings. This was window shopping par excellence, and it wasn't lost on the public.

In the mood of the building's single theme, Connecticut Light and Power dramatized the enhancement of the state's recreational facilities that has been the incidental result of its service to power users. The three dams built on the Housatonic River to increase the company's power output have created Candlewood, Zoar and Lillinonah lakes—all three of which were reproduced in miniature at the company's exhibit with real water and real tiny waves.

Another producer, Arbor Acres Farm, Inc. of Glastonbury, the nation's largest breeder of meat-type poultry, drew throngs to its attractive backyard patio where succulent young birds were being barbecued during the entire period of the Exposition.

It may be, as you often hear, that an alarming number of American housewives are buying all of the family's food either canned or frozen, but exposition officials were certain of one thing. Every woman who bakes a cake, either from mix or from scratch, was at one time or another packed in front of the exhibit of the Connecticut Bakers Association where a series of outstanding artists demonstrated the art of making a cake look like a flower garden, a fancy wedding or a marshmallow and whipped cream concept of what's beyond the pearly gates.

As usual in the Connecticut Building, actual flowers supplied by the Connecticut Florists Association (and freshened daily at each booth) added a distinctive note to the Connecticut Building. And once again the central floor space occupied by Bristol Nurseries, this year laid out in a formal and an informal patio, assured a sense of space in the building and contributed significantly to the mood of gracious living.

Above the main floor in its customary balcony booth, Station WTIC gave the public not only a sample of a radio studio in actual operation, but let the public in on the mysteries of reporting and predicting weather as carried on by Travelers Weather Bureau.

Rounding out the big show, five departments of Connecticut's state government played variations on the common theme, each exhibiting its contribution to good living or recreation. A perennial favorite in the State building, the Board of Fisheries and Game once again drew the crowds, sportsmen and otherwise, to view its exhibit of marine life, wild ducks and small denizens of the field and wood. With the accent on its new construction, the State Highway Department dramatized its contribution to the mobility of both citizen and vacationist within the state's borders.

The Department of Agriculture displayed the state's farm products which, three times daily, make Connecticut a good state in which to live or vacation.

The Aeronautics Department, through animated maps and plane models, displayed its increasing role in bringing vacationists into Connecticut. The Development Commission, meanwhile, in an exhibit of its own, featured its new information center on the Merritt Parkway and the brochures and information pieces it produces to spark that initial desire for a vacation in Connecticut.

As the curtain fell on the thirty-fifth year of the big regional exposition (and the second largest, being surpassed only in 1953 by some 493 visitors), exhibitors in the Connecticut Building were once more agreed that nine days in the "show window of the East" had been an excellent investment in certain future business for some and in good public relations for all.

Each annual show confirms more unmistakably the foresight of Connecticut industry in raising the money that made the erection of the Connecticut Building possible. As it will be remembered, the General Assembly had appropriated $35,000 which, even during the low-cost construction rates of the thirties, was not half enough to build the state's dignified structure modeled on the Old State House at Hartford. Over and above the immediate profits of increased sales, the exposition affords the manufacturer an exceptional opportunity to bring the home office right down to the grass roots and to glean there some permanently valuable experience that is inevitably diluted when it has to filter back through the normal channels of distribution.

"I Was Railroaded"

(Continued from page 11)

hard, honest work. There was no time now for me to ponder my future. My family and I had to eat and have a roof over our heads. So my brave wife went to work as a saleslady in a clothing store where she still works to help support our family. For a while I received unemployment compensation. Now I am trying my hand as an insurance adjuster.

Mrs. Mac and I hope and pray that our sacrifice for the principle of the right to work will not be lost and that the millions of American workers whom we symbolize, whether in railroading, factory, shop or store, will work and fight to get laws passed that will restore to us all our heritage of **free** citizens.

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HOW WOULD YOU DECIDE?

In this department each month there will be published labor relations grievances that were settled by arbitration. Read the grievances and check your opinion against the arbitrators ruling. Selection of cases made by MAC counsel.

Must a company discipline an employee for taking a day off to prevent a finding that it has given permission?

Here's what happened.

An employee was married on the evening of May 24. He came to work on Friday the 25th and told the company he would like Monday and Tuesday of next week off, as that, in connection with Decoration Day, would give him a five-day holiday for a honeymoon. Under the circumstances when the employee asked permission the company replied, "I don't see why it is not all right under the circumstances, but you will not be paid for the holiday." The reason he would not be paid for the holiday was that the contract provided, "Employees absent from work, on their regular scheduled workday, preceding or following any of the above named holidays [including Memorial Day], may be penalized such holiday pay unless the employee has a valid reason for his absence or unless permission for absence on such days is granted by the company." The union claimed that the company had granted permission and therefore the employee was entitled to holiday pay, but the company claimed it had specifically refused permission as contemplated in the contract but had agreed not to discipline or penalize the employee to any greater extent than the withholding of the holiday pay.

Was the employee entitled to holiday pay?

The arbitration board decided that when the employee requested permission for time off the company had to decide to either grant the time off or refuse it. "Obviously it could not do both and it had to do either. The company admits that it did not refuse (the employee) time off; it refused only to pay him holiday pay." The board then went on to reason that if it did not refuse time off it must have granted him permission; and, since an employee is entitled to holiday pay even though absent on a qualifying day if permission for absence on such day is granted by the company, this employee is entitled to his holiday pay.

What hours constitute Sunday work under a contract?

Here's what happened.

The collective bargaining agreement being interpreted was the first contract between the parties. Prior to this agreement the scheduled work week consisted of seven consecutive workdays of 24 hours each, beginning at 11 p.m. Sunday and ending at 11 p.m. the following Sunday. The first shift ran from 11 p.m. to 7 a.m., the second shift from 7 a.m. to 3 p.m. and the third shift from 3 p.m. to 11 p.m. The scheduled 24-hour workday of Monday began at 11 p.m. Sunday and ended at 11 o'clock Monday night and so forth. Under the contract the parties changed the work week and worked out a schedule to provide that the work week began at 7 a.m. Monday and continued to 7 a.m. the following Monday, with the first shift being from 7 a.m. to 3 p.m., the second shift from 3 to 11 p.m. and the third shift from 11 p.m. to 7 a.m. The contract also provided that double time should be paid for all work performed on "Sunday." The employee in question worked an eight-hour shift beginning at 11 p.m. Saturday and ending at 7 a.m. Sunday. The union claimed that the term "Sunday" means the period from midnight to midnight and thus the employee would be entitled to double time from midnight to 7 a.m. The company claimed that the term "Sunday" means the 24-hour workday of Sunday, which starts at 7 a.m. Sunday and goes to 7 a.m. Monday.

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What is "Sunday?"

The arbitrator felt that the evidence disclosed that while the parties changed the workday and work week schedules they continued the previous concept of workdays, which never did coincide with calendar days. Consequently, the contract should be read in this light and the hours from 7 a.m. Sunday to 7 a.m. Monday should be considered Sunday work under the contract; and, therefore, the employee was not entitled to double time for working from midnight to 7 a.m. on Sunday.

Does the company waive its right to raise the question of arbitrability by investigating a grievance?

Here's what happened.

The employee claimed he was improperly classified under a job evaluation system and sought an upward classification with retroactive adjustment to the date of the grievance. The company investigated the grievance but found that the employee had been properly classified and scored and that the job description accurately described the duties being performed. However, the union proceeded with the grievance to the point of arbitration, and at the arbitration hearing the company claimed the question was not arbitrable because this same job had previously been evaluated by another arbitrator as a result of a grievance filed on behalf of the same employees and the parties had agreed at the time of the previous decision that it would be final and binding on both of them. Among other things, the union claimed that the company, by accepting the grievance and processing it, had waived any right to claim it was not a new grievance under the contract.

Had the company waived its right to claim the grievance was governed by the old decision and hence not arbitrable?

The arbitrator decided that by this willingness to process a submitted grievance and to investigate the claims the company does not waive its right to raise the issue of arbitrability if the grievance reaches that stage. He felt that what the company did in processing the grievance for good employee relations and to resolve any differences rather than to assert the technical defense of arbitrability without any investigation should not prejudice its right to raise that question if the grievance actually got to arbitration.



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Other pavements frequently earn less than they cost. The resulting drain on available highway revenues leaves less and less money for building urgently needed new roads.

You pay for roads Mr. Motorist. To help obtain self-supporting, profit-making roads, get behind and support sound highway planning. And remember, concrete pavements are moderate in first cost, cost little to maintain, yet last a lifetime. Concrete is your best pavement value.

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PUBLIC RELATIONS

BY A. CARL MESSINGER

Public Relations Director

How important are supervisors? At the annual Public Relations Society of America convention, foremen were mentioned as a key to improve employee relations. At the National Association of Manufacturers Annual Congress of American Industry, Reuben B. Robertson, Jr., president, Champion Paper and Fibre Company, emphasized the importance of foremen in a good employee relations program. He concluded, "Without good employee relations, the company cannot have good community or public relations."

New light on the subject is thrown by a survey conducted by the National Council of Industrial Management Clubs. More than 1600 supervisors throughout the nation were asked opinions concerning their relationship to management of the companies for whom they worked. According to the Ohio Manufacturers' Association, about one half of these supervisors were first-line foremen, the remainder were general foremen, supervisors and other middle management line and staff supervisors.

Results of the survey include the following:

Only 27.4% of the supervisors feel they are definitely a part of management.

Only 21.3% said they practically always are given an opportunity to present their thinking and experience before new policies are put into effect.

Only 33.4% said they learn about important changes in company procedures and policies primarily through established lines of communications.

Only 48.8% said management always will back them up, if they are right, when they make a decision or take a stand on some issue.

Only 39.1% said they thought the best interest of foremen definitely would not be furthered by unionization.

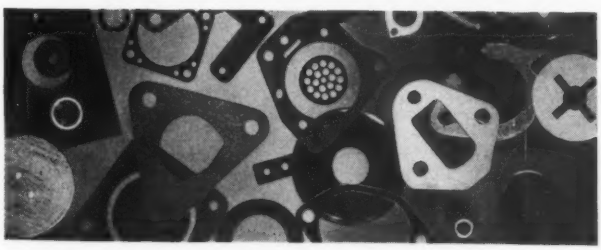
How much attention is your company paying to the indoctrination and continued education of supervisors? Do they identify themselves with management? Is their status obscure in their own minds?

As a means of dramatizing the role of these people, Johns Manville dedicated an issue of the company's monthly magazine as a "Salute to Foremen."

One foreman was selected as typical. Using on-the-job pictures plus narrative, the article shows how the foreman and his crew work together during the day's operation. Graphically shown is the foreman's responsibility for meeting the company's requirements to produce quality products at a competitive cost.

Do your supervisors feel they are part of management? These are the men and women who communicate with your employees on a person to person, face to face basis. You select them to represent management. Why not equip them with the sense of participation that will allow them to do the job you want them to do?

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TRANSPORTATION

By JOHN B. HEDGES

Traffic and Export Manager

Rails Seek 15% Increase

On September 27 the Eastern and Western rail lines, together with some short lines in the South, petitioned the Interstate Commerce Commission for permission to increase their rates and charges by 15% with the usual special provisions for some agricultural products, sugar, lumber, coal and coke. Their petition came as a climax to many weeks of conferences over the amount of increase needed and the procedure to be followed in seeking it. The carriers still do not have unanimous support within their own ranks for their action. Some of the larger southern lines characterize the request as "untimely". One eastern railroad, the Delaware, Lackawanna and Western, has declined to join in the petition.

The railroads are frank to state that this proposed increase is not to alleviate acute economic hardship, but rather to improve their financial position by making railroad investments more attractive and consequently making it easier for the carriers to borrow at reasonable interest rates the funds necessary for modernization of equipment and right of way. They say that the additional revenue produced would be used to reduce and in some cases refinance present indebtedness, to increase their net earnings and to provide for improved facilities. Railroad spokesmen emphasized particularly the need to modernize their physical plant for greater efficiency and lower operating costs. They feel that if they attain these objectives with resulting better service to the public, they should eventually be able to reduce freight rates.

In their statements, the railroads are careful to point out that this requested boost in revenue is not to meet the impact of the increased wages which will undoubtedly be forthcoming as a result of present negotiations with several of the railroad brotherhoods. They maintain that any substantial increase in their payroll burden will be considered separately as the basis for an additional increase over and above 15%.

This matter will be handled on a full hearing and investigation basis as a regular ex parte procedure. Opposition is expected from large segments of the shipping public, but the rail carriers seem confident of making the case strong enough to secure the additional revenue they need.

Leasing Practice O.K'd. by Examiner

The leasing or renting of motor vehicles without drivers to shippers for their use in transporting their own freight has again been considered by the Interstate Commerce Commission. In a proposed report in MC-C-1894, *Wynn's Truck Rental Inc., Equipment Rental Inc., Glass Inc., Ludman Corp. —Investigation of Operations,* the I.C.C. Examiner, W. J. Kane, has recommended that the Commission find that shippers using leased or rental equipment under their own control with their own drivers and transporting their own property are not engaging in operation as common or contract carriers by motor vehicle in interstate commerce. He further recommended that the use of jointly leased motor vehicles by two shipper co-lessees furnishing their own drivers be found not subject to regulation under the Interstate Commerce Act.

The essential factors that exempt such transportation from regulation are:

(1) The transportation must be in bona fide furtherance of the primary manufacturing business of the lessee or lessees.

(2) The control and direction of the vehicles must be completely in the hands of the shippers.

(Continued on page 74)

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ACCOUNTING HINTS

Contributed by the Hartford Chapter National Association of Cost Accountants to stimulate the use of better accounting techniques in industry.

The Statement of Source and Application of Funds

By LAWRENCE P. WEBSTER
University of Connecticut

ONE OF the aids developed for business use during the twentieth century is *the statement of source and application of funds* which is also referred to as *flow of funds statement, the statement of financial changes,* and the *where-got, where-gone statement.*

Business management, since the advent of accounting techniques has always relied upon the *balance sheet,* a summary statement drawn up to show the overall state of affairs brought about by a large number of business transactions. This gives the financial position of a business at stated moments of time but tells little as to the causes of changes between the stated moments. The *operating statement,* quite frequently referred to as the *profit and loss statement,* supplements the balance sheet since it explains, to a large degree, the changes in proprietorship brought about by transactions with outsiders during the passage of a period of time.

The source and application of funds statement, like the operating statement, measures changes during the passage of a period of time. Instead of explaining the changes in only one element of the balance sheet, as does the operating statement, it attempts to explain changes in all items of the balance sheet, insofar as these items affect the flow of funds or working capitol through a business.

Technically, the balance remaining after the current liabilities have been deducted from the current assets is the reservoir of working capital. Working capital is the revolving fund of the trading cycle which continually flows from cash into merchandise which is then sold and through collection flows back in increased amount, if the concern operated profitably, into cash. This is used to pay operating expenses, buy new stocks of merchandise to start another cycle of trade over again.

Management has two major financial functions, (1) to operate the business profitably, and, (2) to manage the activities of the business to keep it solvent at all times. Operating at a profit and maintaining solvency over a relatively short period of time, although related, are sometimes diametrically opposed to each other. There are numerous examples of firms which expanded rapidly and profitably but at the same time put a great strain on their working capital in the form of over-extended receivables, expanded inventories, increased current debt, and a decrease of cash. The result is the business operated profitably but was unable to meet its current obligations.

In order to maintain a business in sound financial position an adequate flow of cash must be provided from income and financial operations (1) to pay the operating costs of a business; (2) to meet any other current obligations; (3) to take care of needed additions to plants and markets; and, (4) to make distribution of earnings to owners of the business. Unless this can be done, the soundness of the financial position deteriorates and insolvency may result.

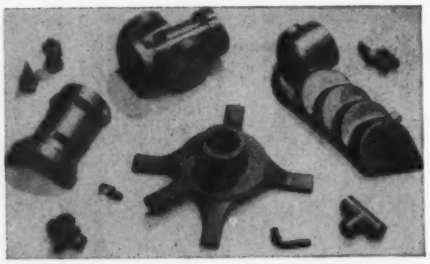
The statement of source and application of funds is prepared from two comparative balance sheets taken between the two dates to be measured, supplemented by an explanation of the changes for all noncurrent and capital items. It provides additional

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information about the financial activities of the business that are not shown by a simple comparison of the balance sheets. For example, an increase in working capital may result from earnings. This may not be disclosed by the net change in retained earnings because the latter item may also have been affected by the declaration of dividends, write-offs of organization costs, adjustments applying to prior periods. Working capital may have declined as a result of equipment purchases. A comparison of the amounts shown for equipment between the two balance sheet dates will show the change but not necessarily the amount expended. Equipment on hand at the beginning of the period may have been discarded or traded during the period which would tend to reduce the amount shown for equipment as compared to the amount expended for equipment. In order to determine the amount expended for equipment, it would be necessary to add to the difference in the equipment account between the two balance sheet dates the amount of equipment disposed of during the period.

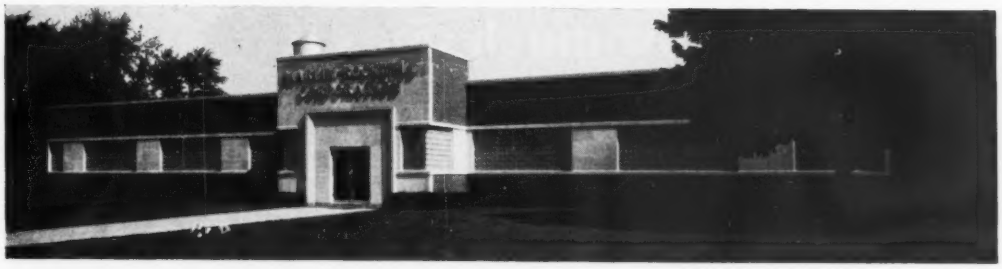
All transactions do not necessarily affect working capital. The collection of accounts receivable increases cash and decreases accounts receivable leaving the working capital unchanged. It is the noncurrent accounts that reveal the source and application of funds.

The statement of source and application of funds ignores internal transactions and reverses accruals. The provision for depreciation, although an expense, does not require funds since funds were expended initially when the equipment was acquired and are not expended a second time for the same purpose. In the preparation of the statement, this item would be reversed as the statement reflects only external transactions.

The statement of source and application of funds offers answers to some of these questions asked by management: "What happened to the profits?" "What caused the change in working capital?" "How much was invested in plant, property, and equipment?" "What happened to funds acquired by long term borrowing?" "How much was obtained through the sale of stock and how was it used?"

It is a valuable analysis of the financial activities of the business showing more significant interrelations between the income operations and the financial operations of the business.

HERE'S WHY MARLIN-ROCKWELL CHOSE HORTON FOR AIR CONDITIONING!



THE Marlin-Rockwell Corporation in Plainville is one of many Connecticut firms that turn to Horton for complete air conditioning service. Marlin-Rockwell's Chief Engineer, John S. Appleyard, explains why:—

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"Actually, the air conditioning here at Marlin-Rockwell was installed over a period of nearly six years. We did it step by step to accommodate our expansion program. First, we had Horton air-condition the office building which was brand-new at the time. Then came our Final Inspection and Ball Gauge Assembly sections and finally, the Inspection and Press Departments. The installations have been completely satisfactory. Employee efficiency improved, naturally, and absenteeism dropped. Just as important, we get better product control".

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BUSINESS TIPS

from

School of Business Administration

University of Connecticut

Operations Research
What It Is and What It Means To You

By J. B. QUINN, *Assistant Professor—Marketing*
University of Connecticut

DESPITE the overwhelming mass of material written about Operations Research, there is still a surprising lack of understanding about the nature and utility of this management tool. Many executives would like to have comprehensible answers to the following questions. "Just what is Operations Research?" "How does OR work?" "What kinds of problems can OR handle?" "How can OR assistance be obtained?"

Brief answers to these questions are presented below.

What is Operations Research?

The Operations Research Society of America defines OR as, "A scientific application to the selection of alternatives under management control." Essentially, therefore, OR is a problem solving device. It is an objective method of gathering pertinent data about a problem, analysing these data, and predicting the outcome of the various possible solutions to the problem.

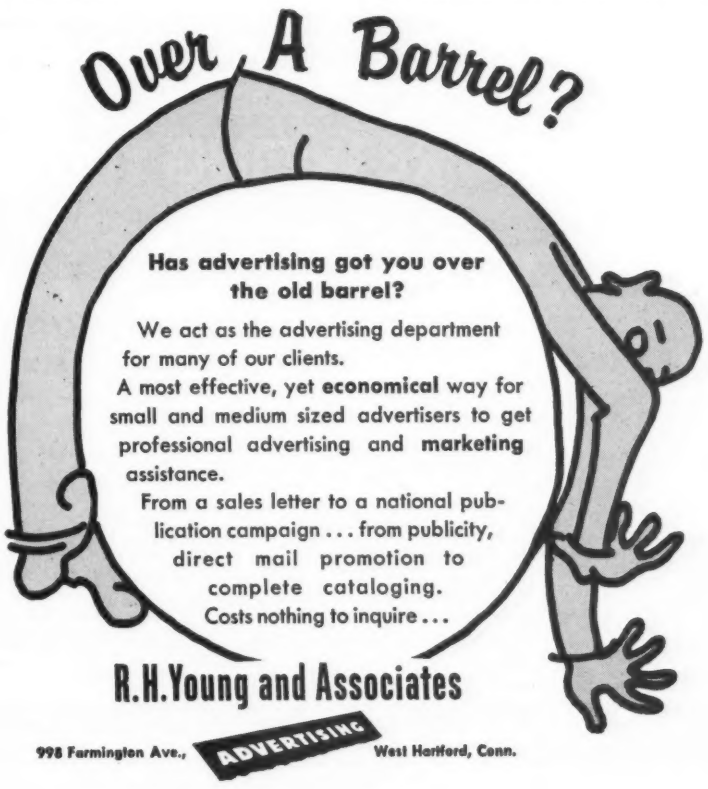
While OR may attack a problem which appears to involve only one facet of the entity's whole activity (such as inventory control), it considers the ramifications of the problem as they affect the total operation. Thus its analyses and predictions tend to maximize benefits for the entity as a whole, rather than for merely one phase of its activities.

How Does Operations Research Work?

Essentially, OR consists of a team of researchers attacking an operational problem using the scientific approach. This OR team frequently consists of specialists in specific disciplines (such as sociology, psychology, anthropology, mathematics, etc.) rather than specialists in the particular problem area which the team is attacking. The use of the OR team of specialists insures an objective approach to the problem, adequate and expert attention to all of the operational ramifications of the problem, and an entirely fresh viewpoint on a possible alternative analyses and solutions.

In analysing an operational situation the team first attempts to obtain an understanding of the underlying cause and effect relationships of the major factors present. It then attempts to construct a "model" to analyse and demonstrate the inter-action of these major factors. (Aircraft engineers similarly construct wind tunnel models of a new aircraft to domonstrate and analyse the forces which may affect its operation.) Models are of two types: "exact", where all the factors are known and inter-action is predictable, and "probabalistic", where some factors are unknown or are not accurately predictable. Physical models may be constructed in some instances, but in most cases the model is expressed in terms of mathematical formulae and symbols.

Once this model is constructed, the OR team, or some other qualified individual or group, is in a position to predict by observation or computation the probable operational results of different variations in the several input factors in a situation (just as the aircraft designer can predict the flight effects of a new wing design after trying it on his model). However, as noted above, many models are a complex of mathematical formulae. Making the computations which these formulae



require can be extremely difficult and time consuming. For this reason there has been a great deal of talk about the use of the new "electronic computers" to handle the mathematical problems of OR in an expeditious and economical manner.

The model ordinarily is capable of handling only the measurable input factors in a situation and of predicting only measurable outcomes of various combinations of these factors. By having qualified persons utilize the constructed model, the executive can determine what combination of input factors will produce the optimum outcome. He can then make decisions affecting controllable input factors to maximize the desired outcome. Conversely, where input factors are not controllable (as weather acting on crop yield) the executive can use the model to predict the outcomes these uncontrollable factors may cause.

The executive, therefore, has a powerful tool to assist him in optimizing decisions. By giving him a comprehensive analysis and prediction of the interaction of the quantitative factors OR enable the executive (1) to single out the critical issues which require executive appraisal and (2) to concentrate on the important qualitative aspects of the problem which might otherwise receive inadequate attention.

What Kinds of Problems Can OR Handle?

To date the major triumphs of OR have been in the solution of operating problems where both input and output factors may be quantified. Because of the extremely high cost of an OR investigation the technique has been successfully applied only to major operational problems. Examples of problems successfully handled by OR include: Establishing bonus systems; partitioning the advertising budget; determining inventory control and reordering policies; developing minimum-cost-of-production schedules for different plant facilities and product mixes; locating plants, warehouses, and sales outlets; developing traffic control systems, make or buy comparison systems, and economic lot size schedules; scheduling work for automatic machinery; and solving weapons systems and tactical problems for the armed services.

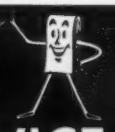
While OR has made dramatic contributions to management planning and control, it still has some serious limitations. These include: its present inability to consider qualitative or intangible factors, the great length of time normally required to conduct an OR investigation and the consequent high cost of OR, the present incapacity of executives to understand and use OR, and certain inadequacies in the handling of long range problems. A recent article* suggests four criteria to be used in determining when OR is applicable:

"1. There should be an opportunity for decision between alternative courses of action.
2. There should be a real possibility for quantitative study and measurement.
3. It should be possible to collect data.
4. It should be possible to evaluate results readily."

Today the use of OR seems limited to the solution of major operational problems which are primarily determinable by quantitative analysis. Operations Researchers are constantly working to overcome the limitations of OR and to extend its techniques into more intangible areas of management

*"*Operations Research for Management*" C. C. Hermann and J. F. Magee, *Harvard Business Review*, July—August 1953.

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*City*_____ *State*_____

decisions. As OR techniques are improved, increasingly diversified applications are envisioned. There is little doubt, however, that for some time to come OR will be limited to the generation of useful analyses and predictions to assist the executive in making his decisions while the decisions themselves will still require the executive's judgment to integrate the OR analysis with the complex of important intangible factors which enter any major decision.

How Can OR Assistance Be Obtained?

While over 50 large concerns are reported to have established staff OR groups, most smaller concerns do not have continuing major problems the solution of which could support a full time OR team. Concerns which cannot support permanent OR groups will find that professional consulting groups like Arthur D. Little, the Methods Engineering Council, etc., offer excellent OR services at a reasonable cost. Representatives from these consulting groups may be called in to give an appraisal of any given situation to determine the applicability of OR or to help establish an internal OR group in your company.



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Transportation

(Continued from page 65)

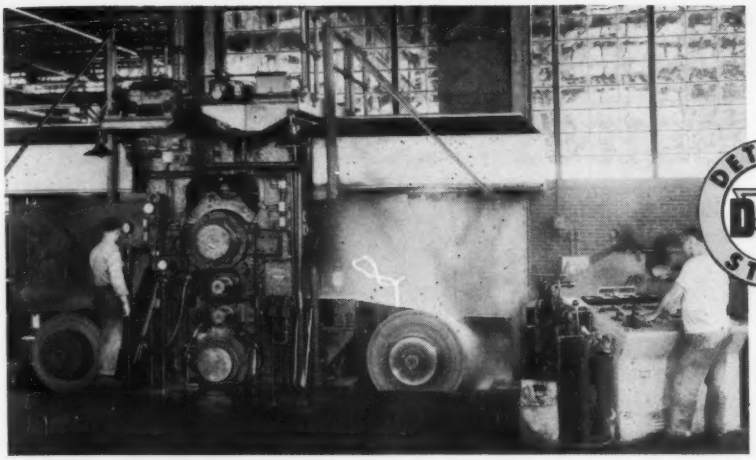
(3) The drivers of such vehicles must be bona fide employees of the shippers.

Three Roads Study Merger Possibility

The boards of three railroads serving as important links for New England traffic have decided to explore the possibilities of merging their properties and operations. Directors of the Erie Railroad, Delaware, Lackawanna & Western Railroad, and the Delaware and Hudson Railroad have appointed members from their respective boards to survey the possible advantages of such a merger.

For some time the Erie and the Lackawanna have been jointly operating two combined freight stations, at Elmira, N. Y., and at Binghamton, N. Y. As of October 13, the Erie began operation of non-rush hour trains into the DL&W stations at Hoboken. These two roads are also presently negotiating for joint dispatch of their tugboats in New York harbor as well as considering joint trackage arrangements in the Southern Tier counties in New York.

These railroads, if combined in one system, would form a network of slightly over 4000 miles of main line. It would be the fourth largest system in the east, ranking behind the Pennsylvania, New York Central, and the Baltimore and Ohio. In some areas, their lines are so situated that they would be able to abandon duplicating and overlapping facilities, thus effecting maintenance and operating economies. Further economies could be realized by joint operation of freight and passenger yards and terminals and by the pooling of certain types of equipment. Should the surveying committee find the merger feasible, application would be made in the regular way to the Interstate Commerce Commission for approval.



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1955 (full year) . . . . . Job-Performance Score 99.738%

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As a regular mill customer you build up SOURCE SECURITY. It is advantageous to have a position on a mill's schedule when steel shortages strike. With all due respect to warehouses, they can get "caught" too.

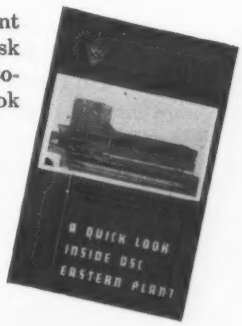
SPECIAL PURPOSE STRIP WORKS BEST

In stampings there are "jobs" and "jobs." But where gauge, or temper, or finish are critical or even borderline factors . . . especially on repetitive or long runs . . . DSC STRIP usually works best. It makes for smooth, steady production with lower unit costs FOB your shipping door.

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**"SH-RIP" is a word coined by us. Its purpose is to avoid the possibility of confusion between MILL ROLLED STEEL STRIP and SHEET STEEL that is cut into strip widths by coil-slitting warehouses, and sometimes described by them as "strip steel."*

Like to see the other equipment we use in producing STRIP? Ask for a free copy of our "photo-visit" booklet "A Quick Look Inside DSC Eastern Plant."



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BUSINESS PATTERN

A comprehensive summary of the ups and downs of industrial activity in Connecticut for the thirty day period ending on the 15th day of the second previous month.

Business at 12% Above Normal

WITH manhour and rail tonnage components lower due to heavy vacation shutdowns, the Index of Connecticut Business for August settled at an estimated 12% above normal.

This softening, which had been expected, was reflected also in life insurance sales, check clearances and in retail trade.

However, with no serious weaknesses evident in the immediate future, the outlook for the 4th quarter is for a moderate pickup in business activity.

The United States Index climbed back to normal following the steel stoppage and is expected to end the year at the 1st quarter average of 16% above normal.

Per Capita Income

Per capita income in Connecticut improved during 1955, being edged out for first place by Delaware. Nevada, which was second in 1954, slipped to third.

Connecticut, with a 1955 figure of $2,499, showed the best dollar improvement of any of the top seven States as well as the United States as a whole.

By way of comparison, the State's per capita income increased 6% during 1955. The slight decrease registered by the farm income portion was more than offset by the substantial gain scored by non-farm income.

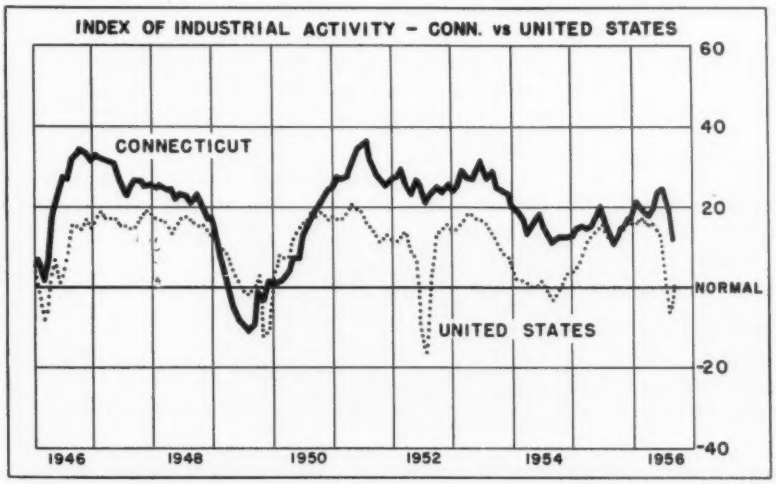
Manufacturing Employment

While Connecticut manufacturing employment has shown a 3% gain over a year ago, this has not been true for all its varied segments.

Manufacturing Employment

Industry	Aug. 1955	Aug. 1956	% Change
Trans. Equip.	61,470	72,490	18
Machinery	71,450	75,100	5
Chemicals	10,400	10,760	3
All Mfg.	414,910	426,960	3
Elec. Equip.	33,010	33,780	2
Metal Fab.	53,470	53,430	- 0.1
Silverware	6,540	5,220	-20

Machinery and transportation equipment (mostly aircraft) have shown the





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largest gains; silverware, the sharpest drop. Metal fabricating has held steady.

Electrical equipment and chemicals reflected gains more in line with the overall picture.

Consumer Prices

August saw a temporary halt to the pronounced advance made by food prices since May of this year.

Food costs, which were down almost 4% in early '56, are now exactly equal to the January '53 level.

Since May, the housing index, which measures all expenses connected with the acquisition and operation of a home, has moved up more than 1%, one of the biggest advances in years.

Factory Earnings & Hours

Earnings and hours of production workers in Connecticut factories did not experience their usual July to August rise.

This was almost entirely due to cutbacks in the workweek among nonmetallic manufacturing firms.

In contrast, all the metal-producing industries averaged more than 40 hours and only two failed to show higher wages than in July.

Outlook for Business in Asia

(Continued from page 10)

or not. They are out after the order, so the price fluctuates greatly from one country to another. The inference is that they are either very anxious to break into the market or are anxious to get foreign exchange at any price.

Many other local conditions, such as extreme nationalism in respect to favoring local industry are in effect. This causes many American made items to be banned completely.

Therefore, the American manufacturers are up against many difficulties about which no action can be taken from this end with the exception of very aggressive sales work and frequent calls upon the trade. The American made products still have a fine reputation, but in view of the very great difference in prices, dollar business is difficult to obtain.

Many suggestions have been made that American manufacturers consider seriously the establishment of a branch plant in the Far East. The market is large undoubtedly for many products but establishing of a plant in any one of the Asian countries is a question to be decided only after the most exhaustive investigation of the specific market for the product to be produced and the regulations governing the establishment of an American plant in a given country.

President's Report

(Continued from page 33)

U. S. Constitution and the constitutions of all the states carry with them guarantees of several rights which are flagrantly violated by compulsory unionism. 4) Inquire of every candidate running for public office whether he favors a right-to-work law. Your Association has sponsored a right-to-work law in previous sessions of our General Assembly. It will do so again in 1957.

Let union officials release their captive members and once more stand equal before the law. Unions affording free democratic expression and action to their members will grow more rapidly in both strength and public influence than by the use of force. This is in the Connecticut spirit; this is the American way.

SERVING
all of
CONNECTICUT
with dependable



Suburban Propane Gas Service for *industrial uses.*

MOTOR FUEL FOR INDUSTRIAL TRUCKS
GENERAL HEAT PROCESSING
ATMOSPHERE GENERATION & HYDRO-CARBON ENRICHMENT
OXY-PROPANE FOR METAL CUTTING AND BRAZING
SPECIAL PROCESSES REQUIRING CLEAN, FAST, CONTROLLABLE HEAT

Dependable Suburban Propane Gas Service is available to industry ANYWHERE in Connecticut—in fact ANYWHERE from Maine to Florida.

To determine how Suburban Propane Gas Service can best serve you, simply call the plant nearest to you. *NO OBLIGATION.*

SUBURBAN PROPANE GAS CORPORATION

The Gas Company Beyond the Gas Mains

Serving Connecticut from

Derby, Conn., Regent 4-2503
Niantic, Conn., Pershing 9-5418
Windsor, Conn., Murdock 8-3623
Coventry, R. I., Coventry 1-3311
Millerton, N. Y., Millerton 1
Mt. Kisco, N. Y., Mt. Kisco 6-5174

CONNECTICUT ADVERTISING SERVICES

A DESCRIPTION OF THE PRINCIPAL ADVERTISING SERVICES RENDERED BY LEADING ADVERTISING AGENCIES IN THE STATE.

Creative Engineering for Better
- Advertising
- Marketing
- Merchandising
- Sales Promotion
- Public Relations

Julian Gross and Associates, Inc.
Advertising
770 Asylum Avenue
Hartford, Conn.
CHapel 9-8491

• DEALER HELPS • CATALOGS • DISPLAYS •
TRADE PAPER
THE F. W. PRELLE COMPANY
Established 1934
Advertising
95 ELM STREET
HARTFORD, CONNECTICUT TELEPHONE JA 7-3233
DIRECT MAIL
• PRODUCT LITERATURE • TRADE PUBLICITY •

Graceman Advertising, Inc.
MEMBER AMERICAN ASSOCIATION OF ADVERTISING AGENCIES
983 Main Street • Hartford, Conn.

956 CHAPEL STREET
NEW HAVEN 10, CONN.
TELEPHONE STate 7-5719
ARGUS ASSOCIATES
Advertising

Advertising
THE BASIC SALES METHOD!
Ted Sommers Inc.
1115 MAIN ST.
BRIDGEPORT 3, CONNECTICUT
PHONE 6-3528

These Four Spaces

Are Now Available For

The Advertising

Of Connecticut Advertising Agencies

Write to The Editor for Details

IT'S MADE IN CONNECTICUT

EDITOR'S NOTE: This department, giving a partial list of peace-time products manufactured in Connecticut by company, seeks to facilitate contacts between prospective purchasers in domestic or foreign markets and producers. It includes only those listings purchased by Connecticut manufacturers. Interested buyers may secure further information by writing this department. Connecticut manufacturers desiring to list their products in this department should write the Editor for listing rates.

(Advertisement)

Accounting Forms
Baker-Goodyear Co The — New Haven

Accounting Machines
Underwood Corporation — Bridgeport

Adding Machines
Underwood Corporation — Bridgeport

Adhesives
Polymer Industries Inc — Springdale
Raybestos Division Raybestos-Manhattan Inc — Bridgeport

Advertising Mats
Lockwood Sons Inc Wm H — Hartford

Advertising Plates
Lockwood Sons Inc Wm H — Hartford

Advertising Specialties
H C Cook Co The 32 Beaver St — Ansonia
Halco Co — New Haven

Aerosol Products
Bridgeport Brass Company — Bridgeport

Air Compressors
Spencer Turbine Co The — Hartford

Air-Conditioning
Dunham-Bush Inc — West Hartford
Norwalk Airconditioning Corp The (forced air heating units oil fired) — South Norwalk

Air Ducts
Wiremold Co The (Retractable) — Hartford

Air Heaters—Direct Fired
Peabody Engineering Corporation — Stamford

Air Impellers
The Torrington Manufacturing Co — Torrington

Aircraft
Sikorsky Aircraft Division United Aircraft Corporation (helicopters) — Bridgeport

Aircraft Accessories
Chandler Evans Div Pratt & Whitney Co Inc. (Piston and Jet Engine Accessories—Carburetors, Fuel Controls, Afterburner Regulators, Pumps, Servomechanisms and Protek Plugs) — West Hartford
Fenn Mfg Co The (Hardened and Ground Gears assemblies) — Newington
Gabb Special Products Div E Horton & Son Company (filler caps—pressure fuel servicing systems) — Windsor Locks
Hamilton Standard Div United Aircraft Corp (propellors and other aircraft equipment) — Windsor Locks
Manning Maxwell & Moore Inc (aircraft pressure switches and jet engine afterburner control systems) — Danbury
Russell Manufacturing Company The (CAA approved safety belts; webbing and hardware for safety belts; shock rings and shock cord; ring and cord hardware; webbing for all aircraft applications) — Middletown

Aircraft Components
Aircraft Welding & Mfg Co Inc — Hartford

Aircraft Engine Timing Tools
Gabb Special Products Div E Horton & Son Company — Windsor Locks

Aircraft Engines
Lycoming Division Avco Manufacturing Corp — Stratford

Aircraft Fasteners
Scovill Manufacturing Company (PANELOC Aircraft Fasteners) — Waterbury

Aircraft Instruments
Gorn Electric Company Inc — Stamford

Aircraft—Repair & Overhaul
Airport Department Pratt & Whitney Aircraft Division — Rentschler Field East Hartford

Aircraft Sheet Metal Work
Aero Form Co — New Haven

Aircraft Studs & Bolts
Britton Mfg Co Inc — Hartford

Aircraft Test Equipment
United Manufacturing Co Division of The W L Maxson Corp — Hamden

Alumilite Aluminum Sheets
Leed Co The H A — Hamden

Aluminum Bronze Castings
Knapp Foundry Company Inc — Guilford

Aluminum Castings
Eastern Malleable Iron Company The — Naugatuck
Newton-New Haven Co 688 Third Avenue — West Haven
Charles Parker Company The — Meriden

Aluminum Extrusions
Bridgeport Brass Company — Bridgeport

Aluminum Forgings
Bridgeport Brass Company — Bridgeport
Consolidated Industries Inc — West Cheshire
Scovill Manufacturing Company — Waterbury 91

Aluminum Ingots
Lapides Metals Corp — New Haven

Aluminum Sand Castings
Bridgeport Deoxidized Bronze Corp — Bridgeport

Aluminum—Sheet and Rod
Scovill Manufacturing Company — Waterbury

Aluminum—Sheets & Coils
United Smelting & Aluminum Co Inc — New Haven

Ammunition
Arms and Ammunition Div Olin Mathieson Chemical Corp — New Haven
Remington Arms Co Inc and Peters Cartridge Div — Bridgeport

Anodizing
Comco Inc Div of Enthone Inc — New Haven
Leed Co The H A — Hamden
Light Metals Coloring Co Inc — Watertown

Anodizing Equipment
Comco Inc Div of Enthone Inc — New Haven

Asbestos
Auburn Manufacturing Company The (gaskets, packings, wicks) — Middletown

Asbestos & Rubber Packing
Colt's Manufacturing Company — Hartford

Asarcon Bronze
Knapp Foundry Company Inc (bushing & bearing stock) — Guilford

Assemblies—Small
Barnes Co The Wallace Div Associated Spring Corp — Bristol
Greist Manufacturing Co The — New Haven
Humason Mfg Co The — Forestville
J H Sessions & Son — Bristol

Automatic Buffing & Polishing Machines
Harper Buffing Machine Company The — East Hampton

Auto Cable Housing
Wiremold Company The — Hartford

Automatic Control Instruments
Bristol Co The (temperature, pressure, flow, humidity, time) — Waterbury

Automobile Accessories
Kilbourn-Sauer Company (lights and other accessories) — Fairfield

Automotive Bodies
Metropolitan Body Company — Bridgeport

Automotive Parts
Bridgeport Thermostat Div Robertshaw—Fulton Controls Co (automobile thermostats) — Milford
Eis Manufacturing Co (Hydraulic and Mechanical) — Middletown
Raybestos Division of Raybestos-Manhattan Inc (Brake Lining, Lined Brake Shoes, Clutch Facings, Automatic Transmission Parts, Fan Belts, Radiator Hose and Miscellaneous Rubber) — Bridgeport

Automotive & Service Station Equipment
Scovill Manufacturing Company (Canned Oil Dispensers) — Waterbury 91

Automotive Tools
Eis Manufacturing Company — Middletown

Bags—Paper
Continental Can Co Paper Container Div — Kensington

Bakelite Moldings
Watertown Mfg Co The — Watertown

Balls
Abbott Ball Co The (steel bearing and burnishing) — Hartford
Hartford Steel Ball Co The (steel bearing and burnishing, brass, bronze, monel, stainless aluminum) — Hartford
Kilian Steel Ball Corp The — Hartford
Pioneer Steel Ball Company Inc (steel for bearings, burnishing, graining; also brass, bronze and stainless) — Unionville

Banbury Mixers
Farrel-Birmingham Company Inc — Ansonia

Barrels
Abbott Ball Co The (burnishing and tumbling) — Hartford
Hartford-Steel Ball Co The (tumbling) — Hartford

Baskets—Wire
Rolock Inc — Fairfield

Bathroom Accessories
Autoyre Company The — Oakville
Charles Parker Co The — Meriden

Batteries
Electrical Div Olin Mathieson Chemical Corp (flashlight, radio, hearing aid and others) — New Haven

Bearings
Fafnir Bearing Co (ball) — New Britain
Marlin-Rockwell Corporation — Plainville
New Departure Div of General Motors (ball) — Bristol
Norma-Hoffmann Bearings Corp (ball and roller) — Stamford

Bellows Assemblies
Bridgeport Thermostat Div Robertshaw—Fulton Controls Co — Milford

Bellows—Metallic
Bridgeport Thermostat Div Robertshaw—Fulton Controls Co — Milford

Bells
Bevin Brothers Mfg Co — East Hampton
Gong Bell Co The — East Hampton
N N Hill Brass Co The — East Hampton

Belt Fasteners
Saling Manufacturing Company (patented self-aligning) — Unionville

Belting
Hartford Belting Co — Hartford
Russell Mfg Co The — Middletown

Bends—Pipe or Tube
National Pipe Bending Co The — 160 River St New Haven

Bicycle Coaster Brakes
New Departure Div General Motors Corp — Bristol

Bicycle Sundries
New Departure Div General Motors Corp — Bristol

Binders Board
Colonial Board Company — Manchester

Blacking Salts for Metals
Enthone Inc — New Haven
Mitchell-Bradford Chemical Co — Bridgeport

Black Oxide Finishing
Black Oxide Inc — New Britain

Black Oxide Treatment
Bennett Metal Treating Co The — 1045 New Britain Ave — Elmwood

Blades
Capewell Manufacturing Company Metal Saw Division (hack saw and band saw) — Hartford

Blocks
Howard Company (cupola fire clay) — New Haven

Blower Fans
Colonial Blower Company — Plainville
Spencer Turbine Co The — Hartford

(Advt.)

IT'S MADE IN CONNECTICUT

Blower Systems
Colonial Blower Company — Plainville
Ripley Co — Middletown

Blower Wheels
Torrington Manufacturing Company The — Torrington

Blueprints and Photostats
Joseph Merritt & Co — Hartford

Boilers
Bigelow Co The — New Haven
General Electric Company (Residential oil and gas fired steam and hot water) — Bridgeport

Bolts and Nuts
Blake & Johnson Co The (nuts machine screw-bolts, stove) — Waterville
Clark Brothers Bolt Co — Milldale

Boring Tools
Atrax Company The (solid carbide) Newington

Box Board
Bird & Son Inc — New Britain
Federal Paper Board Co Inc — Montville, New Haven & Versailles
Lydall & Foulds Paper Co The — Manchester
Robertson Paper Box Co — Montville
Gair Company Inc Robert — Montville
New Haven Board and Carton Co The — New Haven

Boxes
Bird & Son Inc (corrugated, solid fibre, cleated containers) — New Britain
Connecticut Container Corporation — New Haven
Gair Company Inc Robert (corrugated and solid fibre shipping containers) — Portland
Merriam Mfg Co (steel cash, bond, security, fitted tool and tackle boxes) — Durham
Middletown Mfg Co (metal) — Middletown
Warner Bros Co The (Acetate, Paper, Acetate and Paper Combinations, Counter Display, Setup) — Bridgeport

Boxes and Crates
City Lumber Co of Bridgeport Inc The — Bridgeport

Boxes—Folding
Leshine Carton Co — Branford

Boxes—Metal
Merriam Mfg Co (Bond and Security, Cash and Utility, Personal Files and Drawer Safes) — Durham
Scovill Manufacturing Company (aluminum, brass, bronze, copper-cosmetic, drug, hair pin, ointment, pill, powder, rouge, vanity) — Waterbury

Boxes—Paper—Folding
Atlantic Carton Corp — Norwich
Bridgeport Paper Box Co — Bridgeport
Carpenter-Hayes Paper Box Co Inc — East Hampton
Curtis & Sons Inc S — Sandy Hook
Folding Cartons Incorporated (paper, folding) — Versailles
Gair Company Inc Robert — Montville
H J Mills Inc — Bristol
National Folding Box Co Div Federal Paper Board Co Inc (paper folding) — New Haven and Versailles
New Haven Board and Carton Co The — New Haven
Robertson Paper Box Co — Montville
Warner Bros Co The — Bridgeport

Boxes—Paper—Setup
Bridgeport Paper Box Co. — Bridgeport
Heminway Corporation The — Waterbury
H J Mills Inc — Bristol
Strouse Adler Company The — New Haven
Warner Bros Co The — Bridgeport

Braid—Elastic & Non-elastic
Essex Mills Inc — Essex

Brake Cables
Eis Manufacturing Co — Middletown

Brake Linings
Raybestos Division of Raybestos-Manhattan Inc (Automotive and Industrial) — Bridgeport
Russell Mfg Co The — Middletown

Brake Service Parts
Eis Manufacturing Co — Middletown

Brass & Bronze
American Brass Co The (sheet, wire, rods, tubes) — Waterbury
Bridgeport Brass Company (sheet, rod, wire and tubing) — Bridgeport
Bristol Brass Corp The (sheet, wire, rods) — Bristol
Chase Brass & Copper Co — Waterbury
Miller Company The (phosphor bronze and brass in sheets, strips, rolls) — Meriden
Plume & Atwood Mfg Co The (sheet, wire, rod) — Thomaston
Scovill Manufacturing Company — Waterbury 91
Seymour Mfg Co The (strip, sheet & wire) — Seymour
Tinsheet Metals Co The (sheets and rolls) — Waterbury
Western Brass Mills Division of Olin Industries Inc (sheet, strip) — New Haven

Brass & Bronze Ingot Metal
Mitchell Smelting & Refining Co Inc — Botsford
Plume & Atwood Mfg Co The — Thomaston
Whipple and Choate Company The — Bridgeport

Brass, Bronze, Aluminum Castings
Charles Parker Company The — Meriden
Victors Brass Foundry Inc — Guilford

Brass Goods
American Brass Company The — Waterbury
Plume & Atwood Mfg Co The (to order) — Waterbury
Rostand Mfg Co The (Ecclesiastical Brass Wares) — Milford
Scovill Manufacturing Company (to order) — Waterbury 91
Western Brass Mills Div Olin Mathieson Chemical Corp — New Haven

Brass Mill Products
American Brass Company The — Waterbury
Bridgeport Brass Co — Bridgeport
Chase Brass & Copper Co — Waterbury
Plume & Atwood Mfg Co The — Thomaston
Scovill Manufacturing Company — Waterbury 91
Western Brass Mills Div Olin Mathieson Chemical Corp — New Haven

Breathing Equipment
Cycle-Flo Company The — Milford

Brick-Building
Donnelly Brick Co The — New Britain

Bricks—Fire
Howard Company — New Haven
Mullite Refractories Co The — Shelton

Bright Wire Goods
Sargent & Company (Screw Eyes, Screw Hooks, Cup Hooks, Hooks and Eyes, C H Hooks) — New Haven

Broaching
Hartford Special Machinery Co The — Hartford

Bronze & Aluminum Castings
Charles Parker Co — Meriden
Knapp Foundry Company Inc (rough or machined) — Guilford

Bronze Sand Castings
Bridgeport Deoxidized Bronze Corp — Bridgeport

Brooms—Brushes
Fuller Brush Co The — Hartford

Buckles
B Schwanda & Sons — Staffordville
G E Prentice Mfg Co The — Kensington
Hawie Mfg Co The — Bridgeport
North & Judd Manufacturing Co — New Britain
Patent Button Co The — Waterbury
Risdon Manufacturing Co John M Russell Div — Naugatuck

Buffing & Polishing Compositions
Apothecaries Hall Co — Waterbury
Lea Mfg Co — Waterbury

Burners
Plume & Atwood Mfg Co The (kerosene oil lighting) — Thomaston

Burners—Automatic
Peabody Engineering Corporation — Stamford

Burners—Coal and Oil
Peabody Engineering Corporation (Combined) — Stamford

Burners—Gas
Peabody Engineering Corporation (Blast Furnace) — Stamford

Burners—Gas and Oil
Peabody Engineering Corporation (Combined) — Stamford

Burners—Refinery
Peabody Engineering Corporation (For Gas and Oil) — Stamford

Burnishing
Abbott Ball Co The (Burnishing Barrells and Burnishing Media) — Hartford
Pioneer Steel Ball Company Inc (balls, cones, other metallic shapes) — Unionville

Burs
Atrax Company The (carbide) — Newington
Pratt & Whitney Co Inc — West Hartford

Busways
Distribution Assemblies Department, General Electric Co — Plainville

Buttons
B Schwanda & Sons — Staffordville
Frank Parizek Manufacturing Co The — Putnam
Patent Button Co The — Waterbury
Scovill Manufacturing Company (Uniform and Tack Fasteners) — Waterbury 91
Waterbury Companies Inc (Uniform and Fancy Dress) — Waterbury

Cabinets
Charles Parker Co The (medicine) — Meriden

Cabinet Work
Hartford Builders Finish Co — Hartford

Cable—Asbestos Insulated
Rockbestos Products Corp — New Haven

Cable-Interlocked Armor
General Electric Company — Bridgeport

Cable—Nonmetallic Sheathed
General Electric Company — Bridgeport

Cable—Service Entrance
General Electric Company — Bridgeport

Cages
Andrew B Hendryx Co The (bird and animal) — New Haven

Cams
American Cam Company Inc — Hartford
Hartford Special Machinery Co The — Hartford
Rowbottom Machine Company Inc — Waterbury

Canvas Products
F B Skiff Inc — Hartford

Capacitors
Electro Motive Mfg Co Inc The (mica & trimmer) — Willimantic

Carbide Drawing Dies
State Products Co (eyelet special shape dies) — Oakville

Carbide Shape Dies
Thomaston Tool & Die Co (any form) — Thomaston

Carbide Tools
Atrax Company The (solid) — Newington
Precision Tool & Die Co — Waterbury

Card Clothing
Standard Card Clothing Co The (for textile mills) — Stafford Springs

Card Indexes
Wassell Organization Inc — Westport

Carpenter's Tools
Sargent & Company (Planes, Squares, Plumb Bobs, Bench Screws, Clamps and Saw Vices) — New Haven

Carpet
B F Goodrich Sponge Products Division Shelton

Carpet Cushion
B F Goodrich Sponge Products Division Shelton

Carpets and Rugs
Bigelow-Sanford Carpet Co — Thompsonville

Casters
Bassick Company The (Industrial and General) — Bridgeport

Casters—Industrial
George P Clark Co — Windsor Locks

Castings
Connecticut Foundry Co (grey iron) — Rocky Hill
Connecticut Malleable Castings Co (malleable iron castings) — New Haven
Charles Parker Company The (brass, bronze, aluminum) — Meriden
Ductile Iron Foundry Inc — Stratford
Eastern Malleable Iron Company The (malleable iron, metal and alloy) — Naugatuck
Farrel-Birmingham Company Inc (Meehanite, Nodular, Iron, Steel) — Ansonia
H. R. Engineering Laboratories Inc (centrifugal steel mold) — East Haddam
Hartford Electric Steel Corp The (stainless steel) — Hartford
Plainville Casting Company (gray, alloy and high tensile irons) — Plainville
Malleable Iron Fittings Co (malleable iron and steel) — Branford
McLagon Foundry Co (grey iron) — New Haven
Newton-New Haven Co (zinc and aluminum) — 688 Third Ave West Haven
Philbrick-Booth & Spencer Inc (grey iron) — Hartford
Producto Machine Company The — Bridgeport
Scovill Manufacturing Company (Brass & Bronze) — Waterbury 91
Turner & Seymour Mfg Co The (gray iron, semi steel and alloy) — Torrington
Union Mfg Co (grey iron & semi steel) — New Britain
Waterbury Foundry Company The (highway & sash weights) — Waterbury
Wilcox Crittenden & Co Inc (gray iron and brass) — Middletown
Williams Foundry Inc — New Britain

(Advt.)

Castings—Investment
Arwood Precision Casting Corp — Groton

Cements—Refractory
Mullite Refractory Co The — Shelton

Centers
Ready Tool Co The (anti friction, carbide tipped, high speed) — Bridgeport

Chain
Risdon Manufacturing Co John M Russel Div — Naugatuck
Turner and Seymour Mfg Co The (weldless, sash, jack, safety, furnace, universal, lion and cable) — Torrington

Chain—Bead
Auto-Swage Products Inc — Shelton
Bead Chain Mfg Co The — Bridgeport

Chain—Power Transmission and Conveying
Whitney Chain Company — Hartford

Chairs
The Hitchcock Chair Company — Riverton

Chemical Analysis
State Testing Laboratory — Bridgeport

Chemical Manufacturing
Carwin Company The — North Haven

Chemicals
Apothecaries Hall Co — Waterbury
Carwin Company The — North Haven
Macalaster Bicknell Company — New Haven
MacDermid Incorporated — Waterbury
Naugatuck Chemical Division United States Rubber Co — Naugatuck
New England Lime Company — Canaan
Pfizer & Co Inc Chas — Groton

Chemicals—Agriculture
Naugatuck Chemical Division United States Rubber Co (insecticides, fungicides, weed killers) — Naugatuck

Christmas Light Clips
Foursome Manufacturing Co — Bristol

Chromium Plating
Chromium Corp of America — Waterbury
Chromium Process Company The — Shelton
City Plating Works Inc — Bridgeport

Chucks
Cushman Chuck Co The — Hartford
Horton Chuck Div The E Horton & Son Company — Windsor Locks
Jacobs Manufacturing Co The — West Hartford
Union Manufacturing Company — New Britain

Chucks—Drill
Jacobs Manufacturing Co The — West Hartford

Chucks & Face Plate Jaws
Cushman Chuck Co The — Hartford
Union Mfg Co — New Britain
Horton Chuck Div The E Horton & Son Company — Windsor Locks

Chucks—Power Operated
Cushman Chuck Co The — Hartford
Union Manufacturing Company — New Britain

Circuit Breakers
Trumbull Components Department, General Electric Co — Plainville

Circulating Pumps
Corley Co Inc The — Plainville

Clay
Howard Company (Fire Howard "B" and High Temperature Dry) — New Haven

Cleaning Compounds
Enthone Inc (Industrial) — New Haven
Foy Electro-Chemical Co (industrial) — Ansonia

Cleansing Compounds
MacDermid Incorporated — Waterbury

Clock Mechanisms
Lux Clock Mfg Co The — Waterbury

Clocks
E Ingraham Co The — Bristol
Sessions Clock Co The (alarm, kitchen, occasional and office) — Forestville
Seth Thomas Clocks — Thomaston
United States Time Corporation The — Waterbury

Clocks—Alarm
Lux Clock Mfg Co The — Waterbury

Clocks—Automatic Cooking
Lux Clock Mfg Co The — Waterbury

Clutches
Snow-Nabstedt Gear Corp The — New Haven

Clutch Facings
Raybestos Division of Raybestos-Manhattan Inc (Molded, Woven, Semi-metallic and Full-metallic) — Bridgeport
Russell Mfg Co The — Middletown

Coatings
Bischoff Chemical Corporation (Peelable Plastic Coatings) — Ivoryton

Coil Winding Machines
Boesch Mfg Co Inc — Danbury

Coils
Dano Electric Company — Winsted

Coils—Electric
Bittermann Electric Company — Canaan

Coils—Pipe or Tube
National Pipe Bending Co The — 160 River St New Haven
Whitlock Manufacturing Co The — Hartford

Cold Molded Electrical Insulation
Meriden Molded Plastics — Meriden

Commercial Heat Treating
A F Holden Company The — 52 Richard St West Haven

Commercial Truck Bodies
Metropolitan Body Company — Bridgeport

Compacts
Scovill Manufacturing Company (powder and rouge) — Waterbury

Comparators
Pratt & Whitney Co Inc (Electro-limit and Air-O-Limit) — West Hartford

Complete Plating Dept. Installations
Foy Electro-Chemical Co — Ansonia

Compressors
Norwalk Company Inc (high pressure air and gas) — South Norwalk

Computers
Newton Co The (electronic) — Manchester
Reflectone Corporation The — Stamford

Concrete Products
Plastricrete Corp — Hamden

Condenser and Heat Exchanger Tubes
Bridgeport Brass Company — Bridgeport
Scovill Manufacturing Company — Waterbury

Cones
Sonoco Products Co (Climax-Lowell Div) (Paper) — Mystic

Consulting Engineers
McNeal J D (Electrical and Electronic) — New Haven
Stanley P Rockwell Co Inc The (Consulting) 296 Homestead Ave — Hartford

Continuous Mill Gages
Pratt & Whitney Co Inc — West Hartford

Contract Machining
Laurel Mfg Co Inc (Precision Production Small Parts) — Plainville
Malleable Iron Fittings Company — Branford
Charles Parker Co — Meriden

Contract Manufacturers
Fenn Mfg Co The (Precision Machine Work) — Newington
Greist Mfg Co The (metal parts and assemblies) 503 Blake St — New Haven
Merriam Mfg Co (production runs—metal boxes and containers to specifications) — Durham
Charles Parker Co (sheet metal fabricators) — Meriden
Plume & Atwood Mfg Co The (metal parts and assemblies) — Thomaston
Scovill Manufacturing Company (metal parts and assemblies) — Waterbury 91
J H Sessions & Son — Bristol

Controllers
Bristol Company The — Waterbury
Manning Maxwell & Moore Inc — Stratford

Controls—Remote
Panish Controls (Remote Controls for Marine & Aeronautic Applications) — Bridgeport

Converters DC to AC
Electric Specialty Co — Stamford

Conveyor Systems
Leeds Conveyor Mfg Co The — East Haven
Production Equipment Co — Meriden

Copper
American Brass Corp The (sheet, wire, rods, tubes) — Waterbury
Bridgeport Brass Company (sheet, rod, wire and tubing) — Bridgeport
Bristol Brass Corp The (steel) — Bristol
Chase Brass & Copper Co (sheet, rod, wire tube) — Waterbury
Thinsheet Metals Co The (sheets and rolls) — Waterbury
Western Brass Mills Div Olin Mathieson Chemical Corp — New Haven

Copper Castings
Knapp Foundry Company Inc — Guilford

Copper Sand Castings
Bridgeport Deoxidized Bronze Corp — Bridgeport

Copper Sheets
American Brass Company The — Waterbury
New Haven Copper Co The — Seymour

Copper Shingles
New Haven Copper Co The — Seymour

Copperware
Bridgeport Brass Company (cooking utensils) — Bridgeport

Copper Water Tube
American Brass Company The — Waterbury
Bridgeport Brass Co — Bridgeport

Cords—Asbestos Insulated
General Electric Company — Bridgeport

Cords—Braided
General Electric Company — Bridgeport

Cords—Heater
Essex Mills Inc — Essex
General Electric Company — Bridgeport

Cords—Portable
General Electric Company — Bridgeport

Cord Sets—Electric
General Electric Company — Bridgeport
Seeger-Williams Inc — Bridgeport

Cork Cots
Sonoco Products Co (Climax-Lowell Div) — Mystic

Correspondence Files
Wassell Organization Inc — Westport

Corrugated Box Manufacturers
Connecticut Container Corporation — New Haven
Corrugated Containers Inc — Hartford

Corrugated Shipping Cases
Connecticut Container Corporation — New Haven
Connecticut Corrugated Box Div Robert Gair Co Inc — Portland
D L & D Container Corp 87 Shelton Ave — New Haven

Cosmetic Containers
Eyelet Specialty Co The — Waterbury
Plume & Atwood Mfg Co The (metal) — Thomaston
Scovill Manufacturing Company — Waterbury

Cosmetics
J B Williams Co The — Glastonbury

Cotton and Asbestos Wicking
Bland Burner Co The — Hartford

Counting Devices
Veeder-Root Inc — Hartford

Couplings
Scovill Manufacturing Company (hose and tube) — Waterbury

Couplings—Self-Sealing
Sperry Products Inc — Danbury

Cranes and Conveyors
J-B Engineering Sales Co — New Haven

Crushers
Farrel-Birmingham Company Inc (Stone and Ore) — Ansonia

Cups—Paper
Continental Can Co Paper Container Div — Kensington

Cushioning for Packaging
B F Goodrich Sponge Products Division — Shelton
Gilman Brothers Co The — Gilman

Cut Stone
Dextone Co The — New Haven

Cutters
Atrax Company The (solid carbide) — Newington
Barnes Tool Company The (pipe cutters, hand) — New Haven
Mitrametric Co The (ground pinion) — Torrington
Pratt & Whitney Co Inc (Milling Cutters all types) — West Hartford

Cutting & Creasing Rule
Bartholomew Co H I — Bristol

Decalcomanias
Sirocco Screenprints — New Haven

Deep Hole Drilling & Reaming
Hamden Deep Hole Drilling Co — Hamden
Wilson Arms Co The — Hartford

(Advt.)

Deep Drawings
Stanley Pressed Metal — New Britain

Delayed Action Mechanism
M H Rhodes Inc — Hartford
R W Cramer Company Inc The — Centerbrook

Demineralizers
Crystal Research Laboratories — Hartford
Foy Electro-Chemical Co (industrial) — Ansonia

Design and Development
Sight Light Div The American & Machine & Foundry Co (electrical and electronic equipment) — Deep River

Development Work
Saybrook Manufacturing Inc — Old Saybrook

Diamonds—Industrial
Diamond Tool and Die Works — Hartford

Dictating Machines
Dictaphone Corporation — Bridgeport
Gray Manufacturing Company The — Hartford
SoundScriber Corporation The — New Haven

Die Cast Dies
C & F Tool & Die Corp — Bridgeport

Die Castings
Mt Vernon Die Casting Co — Stamford
Newton-New Haven Co Inc — New Haven

Die Casting Dies
ABA Tool & Die Co — Manchester
Eastern Machine Screw Corp The Truman & Barclay Sts — New Haven
Parker Stamp Works Co The — Hartford
Weimann Bros Mfg Co The — Derby

Die Heads—Self Opening
Eastern Machine Screw Corp The — New Haven
Geometric Tool Division, Greenfield Tap & Die Corp — New Haven

Die Polishing Machinery
Hartford Special Machinery Co The — Hartford

Die Sets
Pratt & Whitney Co Inc (Precision) — West Hartford
Producto Machine Company The — Bridgeport
Union Mfg Co (precision, steel and semi-steel) — New Britain

Die Sinkers
Pratt & Whitney Co Inc — West Hartford

Dies
Hoggson & Pettis Mfg Co The 141 Brewery St — New Haven
Mitrametric Co The (ground for gears) — Torrington
Parker Stamp Works Inc The (plastics and die castings) — Hartford
Pratt & Whitney Co Inc (Monocone and Ducone Dies) — West Hartford

Dies & Die Cutting
Douglas Co Geo M — New Haven

Dish Drying Machines
Colt's Manufacturing Company — Hartford

Dish Washing Machines
Colt's Manufacturing Company — Hartford

Display Containers
National Folding Box Co Div Federal Paper Board Co Inc (folding paperboard) — New Haven and Versailles

Displays—Metal
Durham Mfg Co The (Designing & Mfg to customers' specifications) — Durham
Merriam Mfg Co (Contract Work to Individual Specifications) — Durham
Parsons Co Inc W A (custom designed)

Distribution Centers
Distribution Assemblies Department, General Electric Co — Plainville

Door Closers
Sargent & Company — New Haven
Yale & Towne Mfg Co The — Stamford

Doors
Bilco Co The (metal, residential and commercial) — West Haven

Dowel Pins
Allen Manufacturing Co The — Hartford
Holo-Krome Screw Corp The — West Hartford

Drafting Accessories
Joseph Merritt & Co — Hartford

Draft Inductors
Corley Co Inc The — Plainville

Drawer Bottoms
Lustrewood Corp (Lustrewood) — Milford

Drill Presses
Townsend Mfg Co The H P — Elmwood

Drilling Machines
Howe & Faut Inc (Turret Type) — East Norwalk
Pratt & Whitney Co Inc (Deep Hole) — West Hartford

Drilling and Tapping Machinery
Hartford Special Machinery Co The — Hartford

Drop Forgings
Atwater Mfg Co — Plantsville
Billings & Spencer Co The — Hartford
Consolidated Industries — West Cheshire
Wilcox Crittenden & Co Inc — Middletown

Druggists' Rubber Sundries
Seamless Rubber Company The — New Haven

Duplicating Machines—Automatic
Pratt & Whitney Co Inc — West Hartford

Duplicator Tables
Regent Machine Co — Bridgeport

Elastic Narrow Fabric
Essex Mills Inc — Essex

Electric Cables
General Electric Company (for residential, commercial and industrial applications) — Bridgeport
Rockbestos Products Corp (asbestos insulated) — New Haven

Electric—Commutators & Segments
Cameron Elec Mfg Co The (rewinding motors) — Ansonia

Electric Cord Springs
Bristol Spring Manufacturing Co — Plainville

Electric Cords
General Electric Company — Bridgeport
Rockbestos Products Corp (asbestos insulated) — New Haven

Electric Eye Control
Ripley Company Inc — Middletown

Electric Fixture Wire
General Electric Company — Bridgeport
Rockbestos Products Corp (asbestos insulated) — New Haven

Electric Hand Irons
Winsted Hardware Mfg Co (trade mark "Durabilt") — Winsted

Electric Heating Elements
Hartford Element Co — Hartford

Electric Ignition Harnesses
General Electric Company — Bridgeport

Electric Insulation
Case Brothers Inc — Manchester
Stevens Paper Mills Inc The — Windsor

Electric Lighting Fixtures
Fan-Craft Mfg Co (residential, church, post lanterns) — Plainville
Plume & Atwood Mfg Co The — Thomaston
Wasley Products Inc — Plainville

Electric Motor Controls
Arrow-Hart & Hegeman Electric Co The — Hartford

Electrical Outlet and Switch Boxes, and Covers
General Electric Company — Bridgeport

Electric Signs
Berger Sign Co — Hartford

Electric Switches
Arrow-Hart & Hegeman Electric Co The — Hartford

Electric Time Controls
Cramer Controls Corporation The — Centerbrook

Electric Timers
Sessions Clock Co The — Forestville

Electric Timing Motors
Sessions Clock Co The (small) — Forestville

Electric Underfloor Duct System
General Electric Company — Bridgeport

Electric Wire
General Electric Company — Bridgeport
Rockbestos Products Corp (asbestos insulated) — New Haven

Electric Wiring Devices
Arrow-Hart & Hegeman Electric Co The — Hartford

Electric Woven Heating Elements
Pre-Fab Heating Co Inc — Guilford

Electrical and Electronic Assemblies
Sight Light Div The American Machine & Foundry Co — Deep River

Electrical Conduit Fittings & Grounding Specialties
Gillette-Vibber Company The — New London

Electrical Connectors
Burndy Engineering Co Inc — Norwalk

Electrical Control Apparatus
Plainville Electrical Products Co The — Plainville

Electrical Goods
A C Gilbert Co — New Haven

Electrical Motors
Electric Specialty Co — Stamford
U S Electrical Motors Inc — Milford

Electrical Recorders
Bristol Co The — Waterbury

Electrical Relays and Controls
Allied Control Co — Plantsville

Electrical Switchboards
Plainville Electrical Products Co The — Plainville

Electrical Test Equipment
McNeal J D — New Haven

Electrical Wiring Systems
Wiremold Co The — Hartford

Electronic Parts
Terryville Manufacturing Co (Stampings to customer specifications — Terryville

Electronics
Gray Manufacturing Company The — Hartford
McNeal J D — New Haven
Middletown Mfg Co (metal cabinets, chassis panels, brackets, cases) — Middletown
Newton Co The — Manchester
Ripley Co — Middletown
Sturrup Larabee & Warmers Inc — Middletown

Electroplating
City Plating Works Inc — Bridgeport
National Sherardizing & Machine Co — Hartford
Waterbury Plating Company — Waterbury

Electroplating—Equipment & Supplies
Comco Inc Div of Enthone Inc — New Haven
Lea Manufacturing Co The — Waterbury
MacDermid Incorporated — Waterbury

Electroplating & Industrial Selenium Rectifiers
Foy Electro Chemical Co — Ansonia

Electroplating Processes & Supplies
Enthone Inc — New Haven
United Chromium Incorporated — Waterbury

Electrotypes
Barnum-Hayward Electrotype Co Inc — New Haven
Lockwood Sons Inc Wm H — Hartford
New Haven Electrotype Div Electrographic Corp — New Haven

Elevators
Eastern Elevator Co (passenger and freight) — New Haven
General Elevator Service Co — Hartford

Enameling
Waterbury Plating Company — Waterbury

Enamels & Lacquers
Dobbs Chemical Co The (industrial finishes to customers' specifications) — New Haven

End Milling Cutters
Pratt & Whitney Co Inc — West Hartford

End Mills
Atrax Company The (solid carbide) — Newington

Engines
Pratt & Whitney Aircraft Div United Aircraft Corp (aircraft) — East Hartford

Envelopes
Curtis 1000 Inc — Hartford
United States Envelope Company Hartford Division — Hartford

Envelopes—Stock and Special
Continental Can Co Paper Container Div — Kensington

Environmental Testing
State Testing Laboratory — Bridgeport

Extractors—Tap
Walton Company The — West Hartford

Extruders and Accessories
Standard Machinery Co The (for the Wire and Cable Mfrs) — Mystic

Eyelets
American Brass Company The — Waterbury
Platt Bros & Co The P O Box 1030 — Waterbury
Plume & Atwood Mfg Co The — Thomaston
Scovill Manufacturing Company — Waterbury 91
Stevens Co Inc — Waterbury
Waterbury Companies Inc — Waterbury

Eyelets, Ferrules and Wiring Terminals
American Brass Company The — Waterbury
Waterbury Companies Inc — Waterbury

Eyelet Machine Products
American Brass Company The — Waterbury
Ball & Socket Mfg Co The — West Cheshire
Cold Forming Mfg Co The — Waterbury
Plume & Atwood Mfg Co The — Thomaston
Stevens Co Inc — Waterbury
Waterbury Companies Inc — Waterbury

Fabricators
Scovill Manufacturing Company (aluminum, brass, bronze, copper, steel) — Waterbury

Fan Blades
Torrington Manufacturing Company The — Torrington

Fancy Dress Buttons and Buckles
Waterbury Companies Inc — Waterbury

Fans—Electric
General Electric Company — Bridgeport

Fasteners—Aircraft
Scovill Manufacturing Company (PANELOC Aircraft Fasteners) — Waterbury

Fasteners—Laundry Proof
Scovill Manufacturing Company (GRIPPER snap fasteners) — Waterbury

Fasteners—Slide & Snap
G E Prentice Mfg Co The — Kensington
Scovill Manufacturing Company (GRIPPER zippers and GRIPPER snap fasteners) — Waterbury

Felt
Auburn Manufacturing Company The (mechanical, cut parts) — Middletown
Drycor Felt Company (paper makers and industrial) — Staffordville

Felt—All Purpose
American Felt Co (Mill & Cutting Plant) — Glenville
Chas W House & Sons Inc (Mills & Cutting Plant) — Unionville

Fenders—Boat
B F Goodrich Sponge Products Division — Shelton

Fiber-glass Fabrication
Davis Co The E J — New Haven

Fibre Board
Bird & Son Inc — New Britain
Case Brothers Inc — Manchester
C H Norton Co The — North Westchester
Stevens Paper Mills Inc The — Windsor

File Cards
Standard Card Clothing Co The — Stafford Springs

Filing Equipment
Wassell Organization Inc — Westport

Films
Cine-Video Productions Inc — Milford

Finger Nail Clippers
H C Cook Co The — 32 Beaver St Ansonia

Firearms
Colt's Manufacturing Company — Hartford
Junior Screw Machine Products Inc — West Haven
Marlin Firearms Co The — New Haven
O F Mosberg & Sons Inc — New Haven
Remington Arms Company Inc — Bridgeport
Arms and Ammunition Div Olin Mathieson Chemical Corp — New Haven

Fire Alarm Systems
Fire-Lite Alarms Inc — New Haven

Fire Hose
Fabrics Fire Hose (municipal and industrial) — Sandy Hook

Fireplace Goods
American Windshield & Specialty Co The 881 Boston Post Road — Milford
John P Smith Co The (screens) — 423-33 Chapel St New Haven

Fireproof Floor Joists
Dextone Co The — New Haven

Fireworks
M Backes' Sons Inc — Wallingford

Fishing Lures
Dresser Products Inc — Canaan

Fishing Tackle
H C Cook Co The — 32 Beaver St Ansonia

Flashlights
Bridgeport Metal Goods Mfg Co — Bridgeport
Electrical Div Olin Mathieson Chemical Corp — New Haven

Flat Springs
Bristol Spring Manufacturing Co — Plainville
Gemco Manufacturing Co Inc — Southington

Flexible Shaft Machines
Pratt & Whitney Co Inc — West Hartford

Floor & Ceiling Plates
Beaton & Cadwell Mfg Co The — New Britain

Fluorescent Lighting Equipment
Fullerton Manufacturing Corp — Norwalk
Vanderman Manufacturing Co The — Willimantic
Wiremold Company The — Hartford

Foam Rubber
B F Goodrich Sponge Products Division — Shelton

Forgings
Atwater Manufacturing Company — Plantsville
Billings & Spencer Company — Hartford
Capewell Manufacturing Company — Hartford
Clark Brothers Bolt Co — Milldale
Consolidated Industries Inc — West Cheshire
Heppenstall Co (all kinds and shapes) — Bridgeport
Scovill Manufacturing Company (Non-ferrous) — Waterbury 91

Foundries
Connecticut Malleable Castings Co (malleable iron castings) — New Haven
Ductile Iron Foundry Inc — Stratford
Farrel-Birmingham Company Inc (Iron and Steel) — Ansonia
Hartford Electric Steel Corp The — Hartford
Charles Parker Company The (brass, bronze, aluminum) — Meriden
Plainville Casting Company (gray, alloy and high tensile irons) — Plainville
Producto Machine Company The — Bridgeport
Turner & Seymour Mfg Co The (gray, iron, semi steel and alloy) — Torrington
Union Mfg Co (gray iron & semi steel) — New Britain
Wilcox Crittenden & Co Inc (iron, brass, aluminum and bronze) — Middletown
Williams Foundry Inc — New Britain

Fountain Pens and Mechanical Pencils
Waterman Pen Company Inc — Seymour

Foundry Riddles
John P Smith Co The — 423-33 Chapel St New Haven

Frames—Hack Saw
Thompson & Son Co The Henry G. — New Haven

Fuel Oil Pump and Heater Sets
Peabody Engineering Corporation — Stamford

Furnaces
Norwalk Airconditioning Corp The (warm air oil fired) — South Norwalk

Gage Blocks
Pratt & Whitney Co Inc (Alloy steel and Carbide, Hoke and USA) — West Hartford

Galvanizing
Malleable Iron Fittings Co — Branford
Wilcox Crittenden & Co Inc — Middletown

Gaskets
Auburn Manufacturing Company The (from all materials) — Middletown
Raybestos Division of Raybestos-Manhattan Inc — Bridgeport
Tsingris Die Cutting Corp (from all materials) — Waterbury

Gaskets—Insulation
American Felt Co — Glenville

Gas Range Conversion Burner
Holyoke Heater Corp of Conn Inc — Hartford

Gas Scrubbers, Coolers and Absorbers
Peabody Engineering Corporation — Stamford

Gauges
Bristol Co The (pressure and vacuum-recording automatic control) — Waterbury
Helicoid Gage Division American Chain & Cable Co The (pressure and vacuum) — Bridgeport
Manning Maxwell & Moore Inc — Stratford
Pratt & Whitney Co Inc (Precision Measurement all types) — West Hartford

Gears
Mitrametric Co The (blanked fine pitch) — Torrington

Gears and Gear Cutting
Farrel-Birmingham Company Inc — Ansonia
Fenn Mfg Co The — Newington
Hartford Special Machinery Co The — Hartford

Glass Blowing
Macalaster Bicknell Company — New Haven

Glass Cutters
Fletcher-Terry Co The — Forestville

Glass Machinery
Tavano Mfg Co — Torrington

Gold & Silver Plating
Donham Craft Inc (on metals & plastics) — Thomaston

Golf Equipment
Horton Mfg Co The (clubs, shafts, balls, bags) — Bristol

Greeting Cards
A D Steinbach & Sons Inc — New Haven

Grinding
Farrel-Birmingham Company Inc (Roll and Cylinderical) — Ansonia
Hartford Special Machinery Co The (gears, threads, cams and splines) — Hartford
Horberg Grinding Industries Inc (Precision custom grinding; centerless, cylindrical, surfaces, internal and special) — 19 Staples St Bridgeport

Grinding—Centerless
Waterbury Centerless Grinding Co — Milldale

Grinding Heads—Internal
Pratt & Whitney Co Inc (Pneumatic, High Speed) — West Hartford

Grinding Machines
Farrel-Birmingham Company Inc (Roll) — Ansonia
Pratt & Whitney Co Inc (Surface, Die, Gear and Cutter Grinders) — West Hartford
Rowbottom Machine Company Inc (cam) — Waterbury

Grommets
American Brass Company The — Waterbury
Plume & Atwood Mfg Co The — Waterbury

Ground Rubber Rolls
Saybrook Manufacturing Inc — Old Saybrook

Guards for Machinery
Wheeler Co The G E — New Haven

Hack and Band Saw Blades
Capewell Manufacturing Co The — Hartford

Hair Hygiene Preparations
Parker Herbex Corporation — Stamford

Hammers—Carpenters and Machinests
Capewell Manufacturing Company — Hartford

Hand Tools
Billings and Spencer Company (wrenches, sockets and shop tools) — Hartford
Bridgeport Hdwe Mfg Corp The (nail pullers, scout axes, box opening tools, trowels, coping saws, putty knives) — Bridgeport

Hardness Testers
Wilson Mechanical Instrument Div American Chain & Cable Company Inc — Bridgeport

Hardware
Bassick Company The (Automotive) — Bridgeport
Harlock Products Corp — New Haven
Sargent & Company — New Haven
Wilcox Crittenden & Co Inc (marine heavy and industrial) — Middletown
Yale & Towne Mfg Co The — Stamford

Hardware—Marine & Bus
Rostand Mfg Co The — Milford

Hardware—Trailer Cabinet
Excelsior Hardware Co The — Stamford

Hardware, Trunk & Luggage
Corbin Cabinet Lock Div American Hardware Corp — New Britain
J H Sessions & Son — Bristol
Yale & Towne Mfg Co The — Stamford

Hat Machinery
Doran Bros Inc — Danbury

Health Surgical & Orthopedic Supports
Berger Brothers Company The (custom made for back, breast, and abdomen) — New Haven

Heat Elements
Electroflex Heat Inc — Hartford
Safeway Heat Elements Inc (woven wire resistance type) — Middletown

Heat Exchangers
Whitlock Manufacturing Co The — Hartford

Heat Treating
Bennett Metal Treating Co The 1045 New Britain Ave — Elmwood
Commercial Metal Treating Co — Bridgeport
New Britain-Gridley Machine Division The New Britain Machine Co — New Britain
Skene Co Inc The William A (metals) — Bridgeport
Stanley P Rockwell Co Inc The 296 Homestead Ave — Hartford

(Advt.)

Heat-Treating Equipment
Autoyre Company The — Oakville
Barnes Co The Wallace Div Associated Spring Corp — Bristol
Bauer & Company Inc — Hartford
Rolock Inc (Retorts, Muffles, etc.) — Fairfield
Stanley P Rockwell Co Inc The (commercial) 296 Homestead Ave — Hartford

Heat Treating Fixtures
Rolock Inc (Trays, Baskets, etc.) — Fairfield
Wiretex Mfg Co Inc — Bridgeport

Heat Treating Salts and Compounds
Mitchell-Bradford Chemical Co — Bridgeport

Heaters—Electric
General Electric Company — Bridgeport

Heating and Cooling Coils
G & O Manufacturing Co — New Haven

Heating Elements
Hartford Element Co — Hartford

Heavy Chemicals
Naugatuck Chemical Division United States Rubber Co (sulphuric, nitric and muriatic acids and aniline oil)

Hex-Socket Screws
Bristol Company The — Waterbury
Holo-Krome Screw Corp The — West Hartford

High Frequency Alternators
Electric Specialty Co — Stamford

Highway Guard Rail Hardware
Malleable Iron Fittings Co — Branford

Hinges
Homer D Bronson Company — Beacon Falls

Hobs and Hobbings
ABA Tool & Die Co — Manchester
Parker Stamp Works Inc The — Hartford
Pratt & Whitney Co Inc (Die and Thread Milling) — West Hartford

Hoists
J-B Engineering Sales Co — New Haven

Hoists and Trolleys
Union Mfg Company — New Britain

Hose Fittings
Don Mfg Co J M — Naugatuck
Scovill Manufacturing Company — Waterbury

Hose—Flexible Metallic
American Brass Co
American Metal Hose Branch — Waterbury

Hose Supporter Trimmings
Hawie Mfg Co The (So-Lo Grip Tabs) — Bridgeport

Hospital Signal Systems
Connecticut Telephone & Electric Corp — Meriden

Hydraulic Brake Fluids
Eis Manufacturing Co — Middletown

Hydraulic Controls
Sperry Products Inc — Danbury

Hypodermic Needles
Roehr Products Company — Waterbury

Ice Buckets
B F Goodrich Sponge Products Division Shelton

Inductors
C G S Laboratories Inc — Stamford

Industrial Chemicals
Foy Electro-Chemical Co — Ansonia

Industrial Chrome Plating
Mirror Polishing & Buffing Co — Waterbury

Industrial Displays
Sansone Co S Frederick (Designers Builders and Counselors) — Short Beach

Industrial Finishes
Chemical Coatings Corporation — Rocky Hill
United Chromium Incorporated — Waterbury

Industrial Tools—Powder Actuated
Remington Arms Company Inc — Bridgeport

Inhalators
Cycle-Flo Company The — Milford

Inks
Waterman Pen Company Inc — Seymour

Insecticides
American Cyanamid Company — Waterbury

Instalment Payment Books
Wassell Organization Inc — Westport

Insulated Wire & Cable
Geneal Electric Company (for residential commercial and industrial applications) — Bridgeport
Kerite Company The — Seymour

Insulated Wire & Cable Machinery
Davis Electric Company — Wallingford

Instruments
Bristol Company The — Waterbury
J-B-T Instruments Inc (Electrical and Temperature) — New Haven
Manning Maxwell & Moore Inc — Stratford
Pratt & Whitney Co Inc (Precision Measuring) — West Hartford

Integrators
Reflectone Corporation The — Stamford

Inter-Communications Equipment
Connecticut Telephone & Electric Corp — Meriden

Interval Timers
Lux Clock Manufacturing Company — Waterbury
Rhodes Inc M H — Hartford

Jacquard
Case Brothers Inc — Manchester

Japanning
J H Sessions & Son — Bristol

Jig Borer
Moore Special Tool Co (Moore) — Bridgeport
Pratt & Whitney Co Inc — West Hartford

Jigs, Fixtures & Gages
Federal Machine & Tool Co — Bristol

Jig Grinder
Moore Special Tool Co (Moore) — Bridgeport

Keller Machines
Pratt & Whitney Co Inc — West Hartford

Key Blanks
Sargent & Company — New Haven
Yale & Towne Mfg Co The — Stamford

Labels
J & J Cash Inc (Woven) — South Norwalk
Naugatuck Chemical Division United States Rubber Co (for rubber articles) — Naugatuck

Label Moisteners
Better Packages Inc — Shelton

Laboratory Equipment
Eastern Industries Inc — New Haven

Laboratory Supplies
Macalaster Bicknell Company — New Haven

Laces
American Fabrics Company The — Bridgeport
Wilcox Lace Corporation — Middletown

Laces and Nettings
Wilcox Lace Corporation The — Middletown

Lacquers & Synthetic Enamels
Chemical Coatings Corporation — Rocky Hill
I-Sis Chemicals Inc — Stamford
United Chromium Incorporated — Waterbury

Ladders
A W Flint Co — 196 Chapel St New Haven

Laminated Metal
Bridgeport Brass Company — Bridgeport

Lamps
Plume & Atwood Mfg Co The (metal oil) — Waterbury

Lampholders—Incandescent and Fluorescent
General Electric Company — Bridgeport

Lamp Shades
Verplex Company The — Essex

Lanterns—Battery Operated
Electrical Div Olin Mathieson Chemical Corp — New Haven

Lathes—Contin-U-Matic
Bullard Company, The (vertical multi-spindle-continuous turning type) — Bridgeport

Lathes—Man-Au-Trol
Bullard Company The — Bridgeport

Lathes—Mult-Au-Matic
Bullard Company The (vertical multi-spindle-indexing type) — Bridgeport

Lathes—Toolroom and Automatic
Pratt & Whitney Co Inc — West Hartford

Lathes—Vertical Turret
Bullard Company The (single spindle) — Bridgeport

Lead Plating
Christie Plating Co The — Groton

Leather
Norwich Leather Co — Norwich
Herman Roser & Sons Inc (Genuine Pigskin) — Glastonbury

Leather Dog Furnishings
Andrew B Hendryx Co The — New Haven
The Smith-Worthington Saddlery Co — Hartford

Leather Goods Trimmings
G E Prentice Mfg Co The — Kensington

Leather, Mechanical
Auburn Manufacturing Company The (packings, cubs, washers, etc) — Middletown

Letterheads
Lehman Brothers Inc (designers, engravers, lithographers) — New Haven

Levels—Machinist's Precision
Bullard Company The — Bridgeport

Light Assemblies
Saybrook Manufacturing Inc — Old Saybrook

Lighting Accessories—Fluorescent
General Electric Company — Bridgeport

Lighting Equipment
Fullerton Manufacturing Corp — Norwalk
Miller Co The (Miller, Duplexalite, Ivanhoe) — Meriden

Lines—Braided
Essex Mills Inc — Essex

Lime
New England Lime Company — Canaan

Lipstick Cases
Scovill Manufacturing Company — Waterbury

Lipstick Containers
Bridgeport Metal Goods Mfg Co — Bridgeport
Plume & Atwood Manufacturing Co — Waterbury

Lithographers
O'Toole & Sons Inc T — Stamford

Lithographing
Kellogg & Bulkeley A Division of Connecticut Printers Inc — Hartford
Lehman Brothers Inc — New Haven
A D Steinbach & Sons — New Haven

Locks—Banks
Yale & Towne Mfg Co The — Stamford

Locks—Builders
Eagle Lock Co The — Terryville
Sargent & Company — New Haven
Yale & Towne Mfg Co The — Stamford

Locks—Cabinet
Eagle Lock Co The — Terryville
Excelsior Hardware Co The — Stamford
Yale & Towne Mfg Co The — Stamford

Locks—Special Purpose
Eagle Lock Co The — Terryville
Yale & Towne Mfg Co The — Stamford

Locks—Suitcase
Eagle Lock Co The — Terryville

Locks—Suitcase and Trimmings
Excelsior Hardware Co The — Stamford

Locks—Trunk
Eagle Lock Co The — Terryville
Excelsior Hardware Co The — Stamford
Yale & Towne Mfg Co The — Stamford

Locks—Zipper
Excelsior Hardware Co The — Stamford

Loom—Non-Metallic
Wiremold Company The — Hartford

Lubricants—High Pressure
Alpha Molykote Corp The — Stamford

Lubricants—Extreme Temperatures
Alpha Molykote Corp The — Stamford

Lubricating System—Mist
Thompson & Son Co The Henry G. — New Haven

Lumber & Millwork Products
City Lumber Co of Bridgeport Inc — Bridgeport

Machetes
Collins Company The — Collinsville

Machine Design
Black Rock Mfg Company The — Bridgeport (Advt.)

Machine Tool Designers
R & S Company — New Britain

Machine Tools
Bullard Company The — Bridgeport
Farrel-Birmingham Company Inc — Ansonia
Pratt & Whitney Co Inc — West Hartford
Producto Machine Company The — Bridgeport

Machine Work
Black Rock Mfg Company The — Bridgeport
Farrel-Birmingham Company Inc — Ansonia
Fenn Manufacturing Company The (precision parts) — Newington
Hartford Special Machinery Co The (contract work only) — Hartford
Joma Tool Co(small assemblies & parts) — Wolcott
National Sheradizing & Machine Co (job) — Hartford
Parker Stamp Works Inc The (Special) — Hartford
Swan Tool & Machine Co The — Hartford
Torrington Manufacturing Co The (special rolling mill machinery) — Torrington

Machinery
Fenn Manufacturing Company The (special) — Newington
Globe Tapping Machine Company (dial type drilling and tapping) — Bridgeport
Hallden Machine Company The (mill) — Thomaston
Torrington Manufacturing Co The (mill) — Torrington

Machinery—Automatic
Banthin Engineering Company (new and rebuilt) — Bridgeport

Machinery—Bolt and Nut
Waterbury Farrel Foundry & Machine Co The — Waterbury

Machinery—Cold Heading
Waterbury Farrel Foundry & Machine Co The — Waterbury

Machinery Dealers & Rebuilders
Batwinik Brothers — New Haven
J L Lucas and Son — Fairfield
State Machinery Co Inc — New Haven

Machinery—Extruding
Standard Machinery Co The — Mystic

Machinery—Metal-Working
Fenn Mfg Co The — Newington
Waterbury Farrel Foundry & Machine Co The — Waterbury
Pratt & Whitney Co Inc — West Hartford

Machinery—Nut
Waterbury Farrel Foundry & Machine Co The (forming and tapping) — Waterbury

Machinery—Screw and Rivet
Waterbury Farrel Foundry & Machine Co The — Waterbury

Machinery—Wire Drawing
Fenn Mfg Co The — Newington
Waterbury Farrel Foundry & Machine Co The — Waterbury

Machinery—Wire Straightening
Mettler Machine Tool Inc — New Haven

Machines
Campbell Machine Div American Chain & Cable Co Inc (cutting & nibbling) — Bridgeport
Coulter & McKenzie Machine Co The (special, new development engineering design and construction) — Bridgeport
Patent Button Company The — Waterbury

Machines—Automatic
A H Nilson Mach Co The (Special) — Bridgeport

Machines—Automatic Chucking
Bullard Company The — Bridgeport
New Britain-Gridley Machine Division The New Britain Machine Co (multiple spindle and double end) — New Britain
Pratt & Whitney Co Inc (Potter & Johnson) — West Hartford

Machines—Brushing
Fuller Brush Co The — Hartford

Machines—Contin-U-Matic
Bullard Company The (verticle multi-spindle—continuous turning) — Bridgeport

Machines—Draw Benches
Fenn Manufacturing Company The — Newington

Machines—Forming
A H Nilson Mach Co The (four-slide wire and ribbon stock) — Bridgeport

Machines—Paper Ruling
John McAdams & Sons Inc — Norwalk

Machines—Pipe & Bolt Threading
Capewell Mfg Co The — Hartford

Machines—Precision Boring
New Britain-Gridley Machine Division The New Britain Machine Co — New Britain

Machines—Rolling
Fenn Manufacturing Company The — Newington

Machines—Slotting
Globe Tapping Machine Company The (High Production Screw Head Slotting) — Bridgeport
Waterbury Farrel Foundry & Machine Co The (screw head) — Waterbury

Machines—Spacing Table
Bullard Company The — Bridgeport

Machines—Special
Fenn Mfg Co The — Newington
Fuller Brush Co The — Hartford

Machines—Swaging
Fenn Manufacturing Company The — Newington

Machines—Thread Rolling
Hartford Special Machinery Co The — Hartford
Waterbury Farrel Foundry & Machine Co The — Waterbury

Machines—Turks Head
Fenn Manufacturing Company The — Newington

Machines—Wire Drawing
Fenn Manufacturing Company The — Newington

Machining—Horizontal Boring
Tucker Machine Co — North Haven

Manganese Bronze Ingot
Whipple and Choate Company — Bridgeport

Manicure Instruments
W E Bassett Company The — Derby

Marine Engines
Kilborn-Sauer Company (running lights and searchlights) — Fairfield
Lathrop Engine Co The — Mystic

Marine Equipment
Russell Manufacturing Company The (utility cord and accessory hardware) — Middletown
Wilcox-Crittenden Div North & Judd Mfg Co — Middletown

Marine Reserve Gears
Snow-Nabstedt Gear Corp The — New Haven

Marking Devises
Hoggson & Pettis Mfg Co The — New Haven
Parker Stamp Works Inc The (steel) — Hartford

Material Handling
Parsons Co Inc W A (tote pans) — Durham

Mats—Newspaper
Lockwood Sons Inc Wm H — Hartford

Mattresses
Waterbury Mattress Co — Waterbury

Metal Boxes
Parsons Co Inc W A (tool kits) — Durham

Metal Boxes and Displays
Durham Mfg Co The (Designing & Mfg to customers specifications) — Durham
Merriam Mfg Co (Bond, Security, Cash, Utility, Personal Files, Drawer Safes, Custombilt containers and displays) — Durham
Middletown Mfg Co — Middletown
Charles Parker Co (sheet metal fabricators) — Meriden

Metal Cleaners
Apothecaries Hall Co — Waterbury
Enthone Inc — New Haven
Foy Electro-Chemical Co — Ansonia
MacDermid Incorporated — Waterbury

Metal Cleaning Machines
Colt's Manufacturing Company — Hartford

Metal Finishes
Enthone Inc — New Haven
Mitchell-Bradford Chemical Co — Bridgeport
United Chromium Incorporated — Waterbury

Metal Finishing
Hartford Industrial Finishing Co — Hartford
National Sheradizing & Machine Co — Hartford
Waterbury Plating Company — Waterbury

Metal Formings
Master Engineering Company — West Cheshire
Stanley Pressed Metal — New Britain

Metal Mouldings
Leed Co The H A — Hamden

Metal Novelties
H C Cook Co The — 32 Beaver St Ansonia

Metal Parts Washing Machines
Foy Electro-Chemical Co — Ansonia

Metal Plating—Gold & Silver
Donham Craft Inc — Thomaston

Metal Products—Stampings
American Brass Company The — Waterbury
Plume & Atwood Manufacturing Co — Thomaston
J H Sessions & Son — Bristol
Scovill Manufacturing Company (Made-to-Order) — Waterbury 91
Stanley Pressed Metal — New Britain

Metal Specialties
Excelsior Hardware Co The — Stamford

Metal Spinning
Moseley Metal Crafts Inc — West Hartford

Metal Stampings
American Brass Company The — Waterbury
Autoyre Co The (Small) — Oakville
Better Formed Metals Inc — Waterbury
DooVal Tool & Mfg Inc The — Naugatuck
Excelsior Hardware Co The — Stamford
Greist Mfg Co The — 503 Blake St New Haven
H C Cook Co The — 32 Beaver St Ansonia
Humason Mfg Co The — Forestville
Joma Tool Co — Wolcott
Mohawk Mfg Co (threaded) — Middletown
J A Otterbein Company The (metal fabrications) — Middletown
J H Sessions & Son — Bristol
Patent Button Co The — Waterbury
G E Prentice Mfg Co The — Kensington
Plume & Atwood Mfg Co The — Thomaston
Saling Manufacturing Company — Unionville
Stanley Pressed Metal — New Britain
Swan Tool & Machine Co The — Hartford
Terryville Manufacturing Co — Terryville
Verplex Company The (Contract) — Essex
Waterbury Lock & Specialty Co The — Milford

Meters—Gas
Sprague Meter Company — Bridgeport

Meters—Parking
Rhodes Inc M H — Hartford

Microfilming
American Microfilming Service Company — New Haven

Milk Bottle Carriers
John P Smith Co The — 423-33 Chapel St New Haven

Mill Machinery
Torrington Manufacturing Company The — Torrington

Milling Machines
Pratt & Whitney Co Inc (Keller Tracer—Controlled Milling Machines) — West Hartford
Rowbottom Machine Company Inc (cam) — Waterbury

Mill Products
Scovill Manufacturing Company (aluminum, brass, bronze, nickel silver—sheet, rod, wire, tube) — Waterbury

Mill Supplies
Wilcox-Crittenden Div North & Judd Mfg Co — Middletown

Millwork
Hartford Builders Finish Co — Hartford

Miniature Precision Connectors
Gorn Electric Co — Stamford

Minute Minders
Lux Clock Mfg Co The — Waterbury

Mirror Rosettes and Hangers
Waterbury Companies Inc — Waterbury

Mixing Equipment
Eastern Industries Inc — New Haven
Gabb Special Products Div The E Horton & Son Co — Windsor Locks

Mobile Radio
Connecticut Telephone & Electric Corp — Meriden
(Advt.)

Model Work
B & N Tool & Engineering Co (instruments and timing devices) Oakville

Mops
Fuller Brush Co The Hartford

Motor Control Centers
Distribution Assemblies Department, General Electric Co Plainville

Motor—Generator Sets
Electric Specialty Co Stamford

Motors—Electric Timing
Cramer Controls Corporation The Centerbrook

Motors—Synchronous
Cramer Controls Corporation The Centerbrook
Electric Specialty Co Stamford

Moulded Plastic Products
Butterfield Inc T F Naugatuck
Colt's Manufacturing Company Hartford
Patent Button Co The Waterbury
Waterbury Companies Inc Waterbury
Watertown Mfg Co The 117 Echo Lake Road Watertown

Mouldings
Himmel Brothers Co The (architectural, metal and store front) Hamden

Moulds
ABA Tool & Die Co Manchester
Hoggson & Pettis Mfg Co The (steel) 114 Brewery St New Haven
Parker Stamp Works Inc The (compression injection & transfer for plastics) Hartford

Napper Clothing
Standard Card Clothing Co The (for textile mills) Stafford Springs

Nettings
Wilcox Lace Corp The Middletown

Newspaper Mats
Lockwood Sons Inc Wm H Hartford

Nickel Anodes
Apothecaries Hall Co Waterbury

Nickel Silver
American Brass Company The Waterbury
Bridgeport Brass Company Bridgeport
Plume & Atwood Mfg Co The Thomaston
Seymour Mfg Co The Seymour
Waterbury Rolling Mills Inc (sheets, strips, rolls) Waterbury
Western Brass Mills Div Olin Mathieson Chemical Corp (sheet, strip) New Haven

Nickel Silver Ingot
Whipple and Choate Company The Bridgeport

Night Latches
Sargent & Company New Haven
Yale & Towne Mfg Co Inc Stamford

Non-ferrous Metal Castings
Miller Company The Meriden
Charles Parker Co Meriden

Nuts, Bolts and Washers
Clark Brothers Bolt Co Milldale

Office Equipment
Pitney-Bowes Inc Stamford
Underwood Corporation Bridgeport & Hartford
Wassell Organization Inc Westport

Offset Printing
Kellogg & Bulkeley A Division of Connecticut Printers Inc Hartford

Oil Burners
Miller Company The (domestic) Meriden
Peabody Engineering Corp (Mechanical and/or Steam Atomizer) Stamford
Silent Glow Oil Burner Corp The 1477 Park St Hartford

Oil Tanks
Norwalk Tank Co The (550 to 30M gals, underwriters above and under ground) South Norwalk
Whitlock Manufacturing Co The Hartford

Oils—Cutting
Anderson Oil Co Inc F E Portland

Open Knife Switches and Accessories
Trumbull Components Department, General Electric Co Plainville

Optical Cores & Ingots
Plume & Atwood Mfg Co The Thomaston

Otis Woven Awning Stripes
The Falls Company Norwich

Oven Brazing
Sight Light Div The American Machine & Foundry Co Deep River

Ovens—Electric
Bauer & Company Inc Hartford

Overhead Garage Doors
Wallingford Planing Mill Co Inc Yalesville

Package Sealers
Better Packages Inc Shelton

Packaging Machinery
Colt's Manufacturing Company (box making machinery, Trade mark "Rite Size") Hartford

Packaging & Packing
Mercer & Stewart Co The Hartford

Packing
Auburn Manufacturing Company The (leather, rubber, asbestos, fibre) Middletown
Raybestos Division of Raybestos-Manhattan Inc (Asbestos and Rubber Sheet) Bridgeport

Padlocks
Sargent & Company New Haven
Waterbury Lock & Specialty Co The Milford
Yale & Towne Mfg Co Inc Stamford

Pads—Office
The Baker Goodyear Company New Haven

Paints and Enamels
Staminate Corp The New Haven

Panelboards—Lighting and Distribution
Distribution Assemblies Department, General Electric Co Plainville

Panelyte
Leed Co The H A Hamden

Panta
Moore Special Tool Co (crush wheel dresser) Bridgeport

Paperboard
Federal Paper Board Co Inc Montville, New Haven & Versailles
Gair Company Inc Robert Montville
Robertson Paper Box Co Montville
New Haven Pulp and Board Co The New Haven

Paper Box—Partitions
American Rondo Corporation (specialty partitions) Hamden

Paper Boxes
Atlantic Carton Corp (folding) Norwich
National Folding Box Co Div Federal Paper Board Co Inc (folding) New Haven & Versaille
New Haven Board and Carton Co The New Haven
Mills Inc H J Bristol
Robertson Paper Box Co (folding) Montville

Paper Boxes—Folding and Setup
Bridgeport Paper Box Company Bridgeport
M Backes' Sons Inc Wallingford

Paper Clips
H C Cook Co The (steel) 32 Beaver St Ansonia

Paper Mill Machinery
Farrel-Birmingham Company Inc Ansonia

Paper Tubes and Cores
Sonoco Products Co (Climax-Lowell) Div Mystic

Parachute Cord
Essex Mills Inc Essex

Parallel Tubes
Sonoco Products Co (Climax-Lowell) Div Mystic

Parking Meters
Rhodes Inc M H Hartford

Parts
Scovill Manufacturing Company (ammunition, electric instrument, electrical appliance, fountain pen, instrument, lighting fixture, ordance, etc.—blanked, stamped, formed, drawn, re-drawn, forged, screw machined, headed, pointed, finished) Waterbury

Pattern-Makers
Farrel-Birmingham Company Inc Ansonia

Penlights
Bridgeport Metal Goods Mfg Co Bridgeport

Pet Furnishings
Andrew B Hendrix Co The New Haven

Phosphor Bronze
American Brass Company The Waterbury
Bridgeport Brass Company Bridgeport
Miller Company The (sheets, strips, rolls) Meriden
Seymour Mfg Co The Seymour
Waterbury Rolling Mills Inc (sheets, strips, rolls) Waterbury
Western Brass Mills Div Olin Mathieson Chemical Corp (sheet, strip) New Haven

Phosphor Bronze Ingots
Whipple and Choate Company The Bridgeport

Photo Engraving
Dowd Wyllie & Olson Inc Hartford
Wilcox Photo Engraving Co Inc New Haven

Photoflash Batteries
Electrical Div Olin Mathieson Chemical Corp New Haven

Photographic Equipment
Electrical Div Olin Mathieson Chemical Corp New Haven
Kalart Company Inc Plainville

Piano Repairs
Pratt Read & Co Inc (keys and action) Ivoryton

Piano Supplies
Pratt Read & Co (keys and actions, backs, plates) Ivoryton

Pins
CEM Company ("Spirol") Danielson

Pin Up Lamps
Verplex Company The **Essex**

Pipe
American Brass Co The (brass and copper) Waterbury
Bridgeport Brass Co (brass and Copper) Bridgeport
Chase Brass & Copper Co (red brass and copper) Waterbury
Howard Co (cement well and chimney) New Haven

Pipe Fitters Hand Tools & Pipe Threading Machines
Capewell Manufacturing Company Hartford

Pipe Fittings
Corley Co Inc Plainville
Malleable Iron Fittings Co Branford

Pipe Plugs
Holo-Krome Screw Corporation The (countersunk) West Hartford

Pipe Plugs—Socketed
Holo-Krome Screw Corp The West Hartford

Plastic Coatings
Bischoff Chemical Corporation (Peelable Plastic Coatings) Ivoryton

Plastic Bottles
Plax Corporation Bloomfield

Plastic Buttons
Frank Parizek Manufacturing Co The West Willington
Patent Button Co The Waterbury

Plastic Fabrication
Humphrey Fabricating Corporation Unionville

Plastic Film & Sheet Materials
Plax Corporation Bloomfield

Plastic Gems
Colt's Manufacturing Company Hartford

Plastic Lining Equipment
Comco Inc Div of Enthone Inc New Haven

Plastic Pipe and Fittings
Comco Inc Div of Enthone Inc New Haven

Plastic Molders
Plastic Molding Corporation Sandy Hook

Plastic Molding
Butterfield Inc T F Naugatuck
U S Plastic Molding Corporation Wallingford

Plastic—Moulders
Colt's Manufacturing Company Hartford
Conn Plastics Waterbury
Waterbury Companies Inc Waterbury
Watertown Mfg Co The Watertown

Plastic Printing Plates
Lockwood Sons Inc Wm H Hartford

Plastic Wire Coating Materials
Electronic Rubber Co Stamford

Plastics
B F Goodrich Sponge Products Division Shelton
Naugatuck Chemical Division United States Rubber Co Naugatuck
(Advt.)

Plastics Machinery
Black Rock Mfg Company The — Bridgeport
Farrel-Birmingham Company Inc — Ansonia

Plastics Plated—Gold & Silver
Donham Craft Inc — Thomaston

Plastics—Moulds & Dies
Crown Tool & Die Co Inc — Bridgeport
Parker Stamp Works Inc The (for plastics) — Hartford

Plasticrete Bloc
Plasticrete Corp — Hamden

Platers
Acme Chromium Plating Co — New Haven
Christie Plating Co — Groton
City Plating Works — Bridgeport
Patent Button Co The — Waterbury
Water Plating Company — Waterbury
Chromium Process Company The (Chromium Plating only) — Shelton

Platers' Equipment
Apothecaries Hall Company — Waterbury
Comco Inc Div of Enthone Inc — New Haven
Foy Electro-Chemical Co — Ansonia
Lea Manufacturing Co The — Waterbury
MacDermid Incorporated — Waterbury

Platers Metal
Plume & Atwood Mfg Co The — Thomaston

Plating
Christie Plating Co The (including lead plating) — Groton
City Plating Works Inc — Bridgeport
Superior Plating Co — Bridgeport

Plating on Metals & Plastics
Donham Craft Inc — Thomaston

Plating Processes and Supplies
Enthone Inc — New Haven
United Chromium Incorporated — Waterbury

Plumbers' Brass Goods
Bridgeport Brass Co — Bridgeport
Keeney Mfg Co The (special bends) — Newington
Scovill Manufacturing Company — Waterbury 48

Plumbing Specialties
Risdon Manufacturing Co John M — Russell Div Naugatuck

Pole Line Hardware
Malleable Iron Fittings Co — Branford

Police Equipment
The Smith-Worthington Saddlery Co — Hartford

Polishing
Mirror Polishing & Buffing Co — Waterbury

Polishing & Buffing
General Polishing & Buffing — Bridgeport

Poly Chokes
Poly Choke Company The (a shotgun choking device) — Tarriffville

Postage Meters
Pitney Bowes Inc — Stamford

Potentiometers—Electronic
Bristol Company The — Waterbury

Precision Electronic Chassis
Saybrook Manufacturing Inc — Old Saybrook

Precision Machine Tool Spindles
Whitnon Manufacturing Co (for milling, grinding, boring & drilling) — Farmington

Precision Manufacturing
Newton Co The (aircraft parts) — Manchester

Precision Revolving Machinery
Whitnon Manufacturing Co — Farmington

Precision Springs & Wire Forms
Rowley Spring Co Inc The — Bristol

Pre-Cut Cottages
Federal Homes Corporation — Canaan

Pre-Engineered Homes
Federal Homes Corporation — Canaan

Prefabricated Buildings
City Lumber of Bridgeport Inc The — Bridgeport

Premium Specialties
Waterbury Companies Inc — Waterbury

Preservatives—Wood, Rope, Fabric
Darworth Incorporated ("Cuprinol") ("Cellu-san") — Simsbury

Press Papers
Case Brothers Inc — Manchester

Presses
Farrel-Birmingham Company Inc (Hydraulic) — Ansonia

Presses—Power
Pneumatic Applications Co The (modernization of presses through conversion to Wichita Air Clutch operation) — Simsbury
Waterbury Farrel Foundry & Machine Co The — Waterbury

Pressure Vessels
Norwalk Tank Co Inc The (unfired to ASME Code Par U 69-70) — South Norwalk
Whitlock Manufacturing Co The — Hartford

Printing
Bussmann Press Inc — New Haven
Case Lockwood & Brainard A Division of Connecticut Printers Inc — Hartford
Finlay Brothers — Hartford
Heminway Corporation The — Waterbury
Hildreth Press — Bristol
Hunter Press — Hartford
Lehman Brothers Inc — New Haven
Taylor & Greenough Co The — Wetherafield
T B Simonds Inc — Hartford
A D Steinbach & Sons — New Haven
The Walker-Rackliff Company — New Haven

Printing Machinery
Banthin Engineering Co (automatic) — Bridgeport
Thomas W Hall Company — Stamford

Printing Plates
Lockwood Sons Inc Wm H — Hartford

Printing Rollers
Chambers-Storck Company Inc The (engraved) — Norwich

Production Control Equipment
Ripley Company Inc — Middletown
Wassell Organization Inc — Westport

Profilers
Pratt & Whitney Co Inc — West Hartford

Propellers—Aircraft
Hamilton Standard Div United Aircraft Corp (propellers and other aircraft equipment) — Windsor Locks

Protective Coatings
Bischoff Chemical Corporation (Peelable Plastic Coatings) — Ivoryton
Harrison Company The A S (Waxes) — South Norwalk

Publishers
O'Toole & Sons Inc The — Stamford

Pumps
Yale & Towne Mfg Co The — Stamford

Pumps—Small Industrial
Eastern Industries Inc — New Haven

Pump Valves
Colt's Manufacturing Company — Hartford

Punches
Hoggson & Pettis Mfg Co The (ticket & cloth) 141 Brewery St — New Haven

Putty Softeners—Electrical
Fletcher Terry Co The — Box 415 Forestville

Pyrometers
Bristol Co The (recording and controlling) — Waterbury

Radiation—Finned Copper
Bush Manufacturing Co — West Hartford
G & O Manufacturing Company The — New Haven
Vulcan Radiator Co The (steel and copper) — Hartford

Radiators—Engine Cooling
G & O Manufacturing Co — New Haven

Radiographic Inspection
State Testing Laboratory — Bridgeport

Ratchet Offset Screw Driver
Chapman Co J W — Durham

Rayon Staple Fiber
Hartford Rayon Corp The — Rocky Hill

Reamers
Atrax Company The (solid carbide) — Newington
Pratt & Whitney Co Inc (All types) — West Hartford

Record Equipment
Wassell Organization Inc (filing equipment) — Westport

Recorders
Bristol Co The (automatic controllers, temperature, pressure, flow, humidty) — Waterbury

Reduction Gears
Farrel-Birmingham Company Inc — Ansonia
Snow-Nabstedt Gear Corp The — New Haven

Refractories
Howard Company — New Haven
Mullite Refractories Company The — Shelton

Refrigeration
Bowser Techanical Refrigeration Div Bowser Inc (high altitude, low temperature) — Terryville
Dunham-Bush Inc — West Hartford

Regulators
Norwalk Valve Company (for gas and air) — South Norwalk
Sorensen & Company Inc — Stamford

Research & Development
Raymond Engineering Laboratories (Electro-Mechanical) — Middletown

Resistance Wire
C O Jeliff Mfg Co The (nickel chromium, copper nickel, iron chromium, aluminum) — Southport
Kanthal Corporation The — Stamford

Respirators
American Optical Company Safety Products Division — Putnam

Resuscitators
Cycle-Flo Company The — Milford

Retainers
Hartford Steel Ball Co The (bicycle & automotive) — Hartford

Rigid Plastic Sheet Material
Gilman Brothers Company, The — Gilman

Riveting Machines
Grant Mfg & Machine Co The — Bridgeport
Ripley Company Inc — Middletown
H P Townsend Manufacturing Co The — Elmwood

Rivets
Blake & Johnson Co The (brass, copper and non-ferrous) — Waterville
Clark Brothers Bolt Co — Milldale
Plume & Atwood Mfg Co The — Thomaston
Raybestos Div of Raybestos-Manhattan Inc The (brass and aluminum tubular and solid copper) — Bridgeport
Raybestos Div of Raybestos-Manhattan Inc The (iron) — Bridgeport

Rods
American Brass Company The (copper, brass, bronze) — Waterbury
Bridgeport Brass Company — Bridgeport
Bristol Brass Corp The (brass and bronze) — Bristol
Scovill Manufacturing Company (aluminum, brass, bronze, etc.) — Waterbury

Rollers—Bituminous Paving
Gabb Special Products Div E Horton & Son Company — Windsor Locks

Roller Skate Wheels
Raybestos Division of Raybestos-Manhattan Inc — Bridgeport

Roller Skates
Arms and Ammunition Div Olin Mathieson Chemical Corp — New Haven

Rolling Mills & Equipment
Farrel-Birmingham Company Inc — Ansonia
Fenn Mfg Co The — Newington
Precision Methods & Machines Inc — Waterbury
Waterbury Farrel Foundry & Machine Co The — Waterbury

Rolls
Farrel-Birmingham Company Inc (Chilled and Alloy Iron, Steel) — Ansonia

Rope Wire
American Steel & Wire Div of U S Steel — New Haven

Rotary Files
Atrax Company The (carbide) — Newington

Routers
Atrax Company The (solid carbide) — Newington

Rubber—Cellular
B F Goodrich Sponge Products Division — Shelton

Rubber Chemicals
Naugatuck Chemical Division United States Rubber Co — Naugatuck
Stamford Rubber Supply Co The ("Factice" Vulcanized Vegetable Oils) — Stamford

Rubber Cutting Machinery
Black Rock Mfg Company The — Bridgeport

Rubberized Fabrics
Duro-Gloss Rubber Co The — New Haven

Rubber Footwear
Goodyear Rubber Co The — Middletown

Rubber Gloves
Seamless Rubber Company The — New Haven

Rubber—Handmade Specialties
Seamless Rubber Company The — New Haven (Advt.)

Rubber Latex Compounds and Dispersions
Naugatuck Chemical Division United States Rubber Co (coating, impregnating and adhesive compounds) Naugatuck

Rubber—Latex Foam
B F Goodrich Sponge Products Division Shelton

Rubber Mill Machinery
Farrel-Birmingham Company Inc Ansonia

Rubber—Molded Specialties
Airex Rubber Prod Corp Portland
Canfield Co The H O Bridgeport
Seamless Rubber Company The New Haven

Rubber Products
Airex Rubber Prod Corp Portland

Rubber Printing Plates
Lockwood Sons Inc Wm H Hartford

Rubber Products—Mechanical
American Felt Co Glenville
Auburn Manufacturing Company The (washers, gaskets, molded parts) Middletown
Canfield Co The H O Bridgeport
Seamless Rubber Company The New Haven

Rubber—Reclaimed
Naugatuck Chemical Division United States Rubber Co Naugatuck

Rubbers
Naugatuck Chemical Div U S Rubber Co (special synthetic) Naugatuck

Rubbish Burners
John P Smith Co The 423-33 Chapel St New Haven

Rust Preventives
Anderson Oil Co Inc F E Portland
Enthone Inc New Haven

Rust Removers
Enthone Inc New Haven

Saddlery
The Smith-Worthington Saddlery Co Hartford

Safety Clothing
American Optical Company Safety Products Division Putnam

Safety Fuses
Ensign-Bickford Co The (mining & detonating) Simsbury

Safety Gloves and Mittens
American Optical Company Safety Products Division Putnam

Safety Goggles
American Optical Company Safety Products Division Putnam

Safety Switches
Trumbull Components Department, General Electric Co Plainville

Saw Blades—Hack
Capewell Mfg Co The Hartford
Thompson & Son Co The Henry G. New Haven

Saw Blades—Hack & Band
Capewell Manufacturing Company Hartford

Saw—Hole
Thompson & Son Co The Henry G. New Haven

Saws, Band, Metal Cutting
Atlantic Saw Mfg Co New Haven
Thompson & Son Co The Henry G. New Haven

Scissors
Acme Shear Company The Bridgeport

Screens
Hartford Wire Works Co The (Windows, Doors and Porches) Hartford

Screw Caps
Weimann Bros Mfg Co The (small for bottles) Derby

Screw Machines
H P Townsend Mfg Company The Elmwood

Screw Machine Products
Accurate Screw Products Inc (B & S Swiss & Davenports) Southington
Apex Tool Co Inc The Bridgeport
Auto Electric Screw Machine Co Inc Bridgeport
Blake & Johnson Co The Waterville
Consolidated Industries West Cheshire
Dependable Automatic Screw Co Waterbury
Eastern Machine Screw Corp The Truman & Barclay Sts New Haven
Fairchild Screw Products Inc Winsted
Franklin Screw Machine Co The (up to 1½" capacity) Hartford
Garthwait Mfg Co A E (up to and incl ½") Waterbury
Greist Mfg Co The (Up to 1½" capacity) New Haven
Horberg Grinding Industries Inc (Heat treated and ground type only) 19 Staples Street Bridgeport
Humason Mfg Co The Forestville
Junior Screw Machine Products Inc West Haven

Screw Machine Products (Cont.)
Lowe Mfg Co The Wethersfield
Main Screw Machine Products (davenport & automatics exclusively) Waterbury
National Automatic Products Company The Berlin
Nelson's Screw Machine Products Plantsville
New Britain Machine Company The New Britain
New Haven Screw Machine Prods Inc (up to 1½" capacity) Milford
Olson Brothers Company (up to ¾" capacity) Plainville
Olson & Sons R P Southington
Peck Spring Co The Plainville
Plume & Atwood Mfg Co The Thomaston
Scovill Manufacturing Company Waterbury 91
United Screw Machine Co Thomaston
Waterbury Machine Tools & Products Co (Brown & Sharpe and Davenport) Waterbury

Screw Machine Tools
American Cam Company Inc (Circular Form Tools) Hartford
Pratt & Whitney Co Inc (Reamers, Taps, Dies, Blades and Knurls) West Hartford
Somma Tool Co (precision circular form tools) Waterbury

Screws
American Screw Company Willimantic
Atlantic Screw Works (wood) Hartford
Blake & Johnson Co The (machine and wood) Waterville
Bristol Company The (socket set and socket cap screws) Waterbury
Clark Brothers Bolt Co Milldale
Eagle Lock Co The Terryville
Holo-Krome Screw Corporation The (socket set and socket cap) West Hartford
Scovill Manufacturing Company Waterbury 91
Superior Manufacturing Co The Winsted

Screws—Socket
Allen Manufacturing Company The Hartford
Bristol Co The Waterbury
Holo-Krome Screw Corp The West Hartford

Sealing Tape Machines
Better Packages Inc Shelton

Service Entrance Equipment
Trumbull Components Department, General Electric Co Plainville

Sewing Machines
Greist Mfg Co The (Sewing Machine attachments) 503 Blake St New Haven
Merrow Machine Co The (Industrial) Hartford
Singer Manufacturing Company The (industrial) Bridgeport

Shaving Soaps
J B Williams Co The Glastonbury

Shears
Acme Shear Co The (household) Bridgeport

Sheet Metal Products
American Brass Co The (brass and copper) Waterbury
Dresser Products Inc (Fabricators) Canaan
Merriam Mfg Co (security boxes, fitted tool boxes, tackle boxes, displays) Durham
Charles Parker Co (sheet metal fabricators) Meriden
Parsons Co Inc W A (fabricators) Durham
Plume & Atwood Mfg Co The Thomaston
United Manufacturing Co Division of The W L Maxson Corp Hamden

Sheet Metal Stampings
American Brass Company The Waterbury
American Buckle Co The West Haven
DooVal Tool & Mfg Inc The Naugatuck
Dresser Products Inc Canaan
I H Sessions & Son Bristol
Patent Button Co The Waterbury
Plume & Atwood Mfg Co The Thomaston
Scovill Manufacturing Company (aluminum, brass, bronze, copper, nickel silver, steel and other metals and alloys) Waterbury

Sheet Steel
Dolan Steel Company Inc Bridgeport

Shell Cores
Victors Brass Foundry Inc Guilford

Shell Molding
Victors Brass Foundry Inc Guilford

Shells
Scovill Manufacturing Company (aluminum, brass, bronze, copper, nickel silver—drawn, stamped—electric socket, screw) Waterbury
Wolcott Tool and Manufacturing Company Inc Waterbury

Shipment Sealers
Better Packages Inc Shelton

Showcase Lighting Equipment
Wiremold Company The Hartford

Signals
H C Cook Co The (for card files) 32 Beaver St Ansonia

Signs
Berger Sign Co (neon electric-porcelain enamel-stainless steel) Hartford

Silk Screen Process Printing
Norton Co R H New Haven

Silk Screen Printing
Sirocco Screenprints New Haven

Silk Screening on Metal
Merriam Mfg Co (Displays and Specialties, to order) Durham

Silver & Gold Plating
Donham Craft Inc (on metals & plastics) Thomaston

Simulators
Reflectone Corporation The Stamford

Sintered Metal Products
Raybestos Division of Raybestos-Manhattan Inc Bridgeport

Sizing and Finishing Compounds
American Cyanamid Company Waterbury

Slide Fasteners
G E Prentice Mfg Co The Kensington
North & Judd Manufacturing Co New Britain
Scovill Manufacturing Company (GRIPPER zippers) Waterbury

Slings
American Steel & Wire Div of U. S. Steel New Haven

Smoke Stacks
Bigelow Company The (steel) New Haven
Norwalk Tank Co The South Norwalk

Snap Fasteners
Scovill Manufacturing Company (GRIPPER snap fasteners) Waterbury

Soap
J B Williams Co The (industrial soaps, toilet soaps, shaving soaps) Glastonbury

Special Machinery
Banthin Engineering Company (complete and/or parts) Bridgeport
Boesch Mfg Co Inc Danbury
Black Rock Mfg Company The Bridgeport
Farrel-Birmingham Company Inc Ansonia
Federal Machine & Tool Co Bristol
Fenn Mfg Co The Newington
Hartford Special Machinery Co The Hartford
H P Townsend Mfg Company The Elmwood
National Sheradizing & Machine Co (mandrels & stock shells for rubber industry) Hartford
Swan Tool & Machine Co The Hartford
Tucker Machine Co North Haven

Special Parts
Fenn Mfg Co The Newington
Greist Mfg Co The (small machines, especially precision stampings) New Haven
J H Sessions & Son Bristol

Spinnings
Gray Manufacturing Company The Hartford

Spline Milling Machines
Townsend Mfg Co The H P Elmwood

Sponge Rubber
B F Goodrich Sponge Products Division Shelton

Spotwelding
Spotwelders Inc (aluminum, steel, magnesium, titanium & alloys) Stratford

Spray Painting Equipment and Supplies
Lea Manufacturing Co The Waterbury

Spring Coiling Machines
Torrington Manufacturing Co The Torrington

Spring Presses
Townsend Mfg Co The H P Elmwood

Spring Units
Owen Silent Spring Division American Chain & Cable Company Inc Bridgeport

Spring Washers
Barnes Co The Wallace Div Associated Spring Corp Bristol

Springs—Coil & Flat
Barnes Co The Wallace Div Associated Spring Corp Bristol
Barrett Co William L Bristol
Bristol Spring Manufacturing Co Plainville
Foursome Manufacturing Co Bristol
Humason Mfg Co The Forestville
Newcomb Spring Corp The Southington
New England Spring Manufacturing Company Unionville
Peck Spring Co The Plainville

Springs—Flat
Barnes Co The Wallace Div Associated Spring Corp Bristol
Bristol Spring Manufacturing Co Plainville
Foursome Manufacturing Co Bristol
Humason Mfg Co The Forestville

Springs—Furniture
Owen Silent Spring Division American Chain & Cable Company Inc Bridgeport

(Advt.)

Springs—Wire
Barnes Co The Wallace Div Associated Spring Corp Bristol
Bristol Spring Manufacturing Co Plainville
Colonial Spring Corporation The Hartford
Connecticut Spring Corporation The (compression, extension, torsion) Hartford
Foursome Manufacturing Co Bristol
Humason Mfg Co The Forestville
D R Templeman Co (coil and torsion) Plainville
J W Bernston Company (coil and torsion) Plainville
Newcomb Spring Corp The Southington

Springs, Wire & Flat
Autoyre Company The Oakville

Sprinklers
Scovill Manufacturing Company (GREEN SPOT) Waterbury

Stamped Metal Products
American Brass Company The Waterbury

Stampings
C & H Mfg Co Inc Watertown
Donahue Mfg Co Inc Watertown
DooVal Tool & Mfg Inc The Naugatuck
Foursome Manufacturing Co Bristol
Joma Tool Co Wolcott
Plume & Atwood Mfg Co The (small) Thomaston
Saybrook Manufacturing Inc Old Saybrook
Scovill Manufacturing Company aluminum, brass, bronze, copper, nickel silver, steel and other metals and alloys—automotive, electrical, radio, etc.—deep drawn, enameled) Waterbury
Stanley Pressed Metal New Britain

Stampings—Small
Acme Shear Co The Bridgeport
Barnes Co The Wallace Div Associated Spring Corp Bristol
Barrett Co William L Bristol
Bristol Spring Manufacturing Co Plainville
Greist Manufacturing Co The New Haven
Humason Mfg Co The Forestville

Stamps
Hoggson & Pettis Mfg Co The (steel) 141 Brewery St New Haven
Parker Stamp Works Inc The (steel) Hartford

Stationery Specialties
American Brass Company The Waterbury

Steel—Alloy and Stainless Bars
Northeastern Steel Corporation Bridgeport

Steel Castings
Hartford Electric Steel Corp The (Carbon, low alloy and stainless steel and Ductile iron) Hartford
Malleable Iron Fittings Co Branford
Nutmeg Crucible Steel Co Branford

Steel—Cold Finished Bars
Northeastern Steel Corporation Bridgeport

Steel—Cold Rolled Spring
Barnes Co The Wallace Div Associated Spring Corp Bristol

Steel—Cold Rolled Stainless
Ulbrich Stainless Steels Wallingford
Wallingford Steel Company Wallingford

Steel—Cold Rolled Strip
Stanley Works The New Britain

Steel—Cold Rolled Strip and Sheets
American Steel & Wire Div of U S Steel New Haven
Detroit Steel Corporation New Haven
Wallingford Steel Company Wallingford

Steel Goods
Merriam Mfg Co (sheets products to order)

Steel—Ground Flat Stock
Thompson & Son Co The Henry G. New Haven

Steel—Hot Roll Bars
Northeastern Steel Corporation Bridgeport

Steel Rolling Rules
Waterbury Lock & Specialty Co The Milford

Steel Strapping
Stanley Works The New Britain

Stereotypes
New Haven Electrotype Div Electrographic Corp New Haven

Stop Clocks, Electric
H C Thompson Clock Co The Bristol

Storage Batteries
R A E Storage Battery Mfg Co Glastonbury

Straps, Leather
Auburn Manufacturing Company The (textile, industrial, skate, carriage) Middletown

Strip Steel
Dolan Steel Company Inc Bridgeport

Structural Mouldings
Leed Co The H A Hamden

Studio Couches
Waterbury Mattress Co Waterbury

Super Refractories
Mullite Refractories Company The Shelton

Surface Metal Raceway & Fittings
Wiremold Company The Hartford

Surgical Dressings
Acme Cotton Products Co Inc East Killingly
Seamless Rubber Company The New Haven

Surgical Rubber Goods
Seamless Rubber Company The New Haven

Swaging Machinery
Fenn Mfg Co The Newington

Switchboards
Distribution Assemblies Department, General Electric Co Plainville

Switchboards Wire and Cables
Rockbestos Products Corp (asbestos insulated) New Haven

Switches—Electric
General Electric Company Bridgeport

Synthetic Fabrics
American Felt Co Glenville

Tabulating Equipment—Manual
Denominator Company Inc Woodbury
Veeder-Root Incorporated Hartford

Tanks
Bigelow Company The (steel) New Haven
Comco Inc Div of Enthone Inc (steel, alloy and lined) New Haven
Connecticut Welders Inc (steel, alloy & lined) Wallingford
Foy Electro-Chemical Co (Metal & Plastic) Ansonia
Norwalk Tank Co The South Norwalk
Rolock Inc (Alloy) Fairfield
Storts Welding Company (steel and alloy) Meriden

Tap Extractors
Walton Company The West Hartford

Tape
Russell Manufacturing Company The (woven cotton and woven glass tape) Middletown

Tapes—Industrial Pressure Sensitive
Seamless Rubber Company The New Haven

Tape Recorders
Conn Telephone & Electric Corp Meriden

Taps
Hanson-Whitney Company The Hartford
Pratt & Whitney Co Inc West Hartford

Tarred Lines
Brownell & Co Inc Moodus

Telemetering Instruments
Bristol Co The Waterbury

Television—Radio
Junior Screw Machine Products Inc West Haven

Testers-Insulation
McNeal J D New Haven

Testers—Insulation Wire & Cable
Davis Electric Company Wallingford

Testers—Non-Destructive
Sperry Products Inc Danbury

Textile Machinery
Merrow Machine Co The 2814 Laurel St Hartford

Textile Printing Gums
Polymer Industries Inc Springdale

Textile Processors
American Dyeing Corporation (rayon, acetate, nylon, dacron, other synthetics) Rockville

Thermometers
Bristol Co The (recording and automatic control) Waterbury
Manning Maxwell & Moore Inc Stratford

Thin Gauge Metals
Plume & Atwood Mfg Co The Thomaston
Thinsheet Metals Co The (plain or tinned in rolls) Waterbury

Thread
American Thread Co The Willimantic
Belding Heminway Corticelli Putnam
Max Pollack & Co Inc Groton and Willimantic
Wm Johl Manufacturing Co Mystic

Thread Chasers
Geometric Tool Division, Greenfield Tap & Die Corp New Haven

Thread Gages
Hanson-Whitney Company The Hartford
Pratt & Whitney Co Inc West Hartford

Thread Milling Machines
Hanson-Whitney Company The Hartford
Pratt & Whitney Co Inc West Hartford

Thread Rolling Machinery
Hartford Special Machinery Co The Hartford

Threading Machines
Grant Mfg & Machine Co The (double end automatic) Bridgeport

Timers, Interval
A W Haydon Co The Waterbury
H C Thompson Clock Co The Bristol
Cramer Controls Corporation The Centerbrook
Rhodes Inc M H Hartford

Timing Devices
B & N Tool & Engineering Co (development and model work) Oakville
Cramer Controls Corporation The Centerbrook
A W Haydon Co The Waterbury
Lux Clock Manufacturing Company Waterbury
Rhodes Inc M H Hartford
Seth Thomas Clocks Thomaston
United States Time Corporation The Waterbury

Timing Devices & Time Switches
A W Haydon Co The Waterbury
Lux Clock Manufacturing Company Waterbury
M H Rhodes Inc Hartford

Tinning
Thinsheet Metals Co The (non-ferrous metals in rolls) Waterbury
Wilcox-Crittenden Div North & Judd Mfg Co Middletown

Tokens
Scovill Manufacturing Company (bus, street car and subway fare) Waterbury

Tool Bits
Thompson & Son Co The Henry G. New Haven

Tool Chests
Vanderman Manufacturing Co The Willimantic

Tool Hardening
Commercial Metal Treating Co Bridgeport

Tools
B & N Tool & Engineering Co (dies, jigs, fixtures, sub-press and progressive) Oakville
Hoggson & Pettis Mfg Co The (rubber workers) 141 Brewery St New Haven

Tools & Dies
C & H Mfg Co Inc Watertown
Lambro Tool-Die & Mfg Co Bridgeport
Metropolitan Tool & Die Hartford
Moore Special Tool Co Bridgeport
Swan Tool & Machine Co The Hartford

Tools, Dies & Fixtures
Greist Mfg Co The New Haven

Tools, Dies, Jigs & Fixtures
Joma Tool Co Wolcott
Lyons Tool & Die (modelwork, jig boring) Meriden
Otterbein Co J A Middletown
Telke Tool & Die Mfg Co New Britain

Tools, Fixtures, Gauges
Fredericks Tool Co J F West Hartford

Toroidal Winding Machines
Boesch Mfg Co Inc Danbury

Totalizers
Reflectone Corporation The Stamford

Toys
Geo S Scott Mfg Co The Wallingford
Gilbert Co The A C New Haven
Gong Bell Co The East Hampton
N N Hill Brass Co The East Hampton
Waterbury Companies Inc Waterbury

Tramways
American Steel & Wire Div of U S Steel New Haven

Transformers
Berkshire Transformer Corp The New Milford
Dano Electric Company Winsted

Trucks—Commercial
Metropolitan Body Company (International Harvester truck chasis and "Metro" bodies) Bridgeport

Trucks—Industrial
George P Clark Co Windsor Locks

Truck—Lift
Excelsior Hardware Co The Stamford
George P Clark Co Windsor Locks

Trucks—Skid Platforms
Excelsior Hardware Co The (lift) Stamford

Tube Bending
Donahue Mfg Co Inc Watertown

Tube Clips
H C Cook Co The (for collapsible tubes) 32 Beaver St Ansonia
Weimann Bros Mfg Co The (for collapsible tubes) Derby

Tube Fittings
Scovill Manufacturing Company (UNIFLARE flared tube and LOXIT compression tube) Waterbury

Tubers
Standard Machinery Co The (tubers for both rubber and plastic industries) Mystic

Tubes—Collapsible Metal
Sheffield Tube Corp The New London (Advt.)

Tubing
American Brass Co The (brass and copper) Waterbury
Bridgeport Brass Company (brass and copper) Bridgeport
G & O Manufacturing Co (finned) New Haven
Scoville Manufacturing Company (Brass and Copper) Waterbury 91

Tubing—Flexible Metallic
American Brass Co Metal Hose Branch Waterbury

Tubing—Heat Exchanger
American Brass Company The Waterbury
Scovill Manufacturing Company Waterbury 91

Tumbling Equipment & Supplies
Esbec Barrel Finishing Corp Beyram
Foy Electro-Chemical Co Ansonia

Tumbling Service
Esbec Barrel Finishing Corp Meriden

Turntables
Macton Machinery Company Inc (industrial & display) Stamford

Typewriters
Royal Typewriter Co Inc Hartford
Underwood Corporation Hartford

Typewriters—Portable
Royal Typewriter Company Inc Hartford
Underwood Corporation Hartford

Typewriter Ribbons and Supplies
Royal Typewriter Company Inc Hartford
Underwood Corporation Hartford and Bridgeport

Ultrasonic Processing Equipment
General Ultrasonics Co The Hartford

Underclearer Rolls
Sonoco Products Co (Climax-Lowell Div) Mystic

Vacuum Bottles and Containers
American Thermos Products Co Norwich

Vacuum Cleaners
Electrolux Corporation Old Greenwich
Spencer Turbine Co The Hartford

Valve Discs
Colt's Manufacturing Company Hartford

Valves—Automobile Tire
Bridgeport Brass Company Bridgeport

Valves
Norwalk Valve Company (sensitive check valves) South Norwalk

Valves—Aircraft
Bridgeport Thermostat Div Robertshaw—Fulton Controls Co Milford

Valves—Radiator Air
Bridgeport Brass Company Bridgeport

Valves—Relief & Control
Beaton & Caldwell Mfg Co New Britain

Valves—Safety & Relief
Manning Maxwell & Moore Inc Stratford

Vanity Boxes
Bridgeport Metal Goods Mfg Co Bridgeport
Plume & Atwood Manufacturing Co Thomaston
Scovill Manufacturing Company Waterbury

Vapor Degreasing Machines
Foy Electro-Chemical Co (Manual & Automatic) Ansonia

Varnishes
Staminite Corp The New Haven

Vegetable Peelers
Colt's Manufacturing Company Hartford

Velvets
American Velvet Co (owned and operated by A Wimpfheimer & Bro Inc) Stonington
Leiss Velvet Mfg Co Inc The Willimantic

Venetian Blinds
Findell Manufacturing Company Manchester
Jennings Company The S Barry New Haven
New England Shade & Blind Co Inc Durham

Venetian Blind Tape
Russell Manufacturing Company The (woven cotton and woven plastic) Middletown

Ventilating Equipment
Foy Electro-Chemical Co Ansonia

Ventilating Systems
Colonial Blower Company Plainville

Vertical Shapers
Pratt & Whitney Co Inc West Hartford

Vibrators—Pneumatic
Branford Co The (industrial) New Haven

Vinyl Extrusion & Moulding Compounds
Electronic Rubber Co Stamford

Vises
Charles Parker Co The Meriden
Fenn Manufacturing Company The (Quick-Action Vises) Newington
Vanderman Manufacturing Co The (Combination Bench Pipe) Willimantic

Wall Paper
Stamford Wall Paper Co Inc Stamford

Washers
American Felt Co (felt) Glenville
Auburn Manufacturing Company The (all materials) Middletown
Blake & Johnson The (brass, copper & non-ferrous) Waterville
Clark Brothers Bolt Co Milldale
Humphrey Fabricating Corp Unionville
Plume & Atwood Mfg Co The (brass & copper) Thomaston
J H Rosenbeck Inc Torrington
Saling Manufacturing Company (made to order) Unionville

Washers—Felt
American Felt Co Glenville
Chas W House & Sons Inc (Mills & Cutting Plant) Unionville

Watches
E Ingraham Co The Bristol
United States Time Corporation The Waterbury

Water Deionizers
Penfield Mfg Co Meriden

Water Heaters
Whitlock Manufacturing Co The (instantaneous & storage) Hartford

Water Heaters—Electric
Bauer & Company Inc Hartford

Water Heaters—Gas or Kerosene
Holyoke Heater Corp of Conn Inc Hartford

Waxes
Harrison Company The A S (and other protective coatings) South Norwalk

Waxes—Floor
Fuller Brush Co The Hartford

Wedges
Saling Manufacturing Company (hammer & axe) Unionville

Welding
Connecticut Welders Inc (fabrication & repairs) Wallingford
Farrel-Birmingham Company Inc Ansonia
G E Wheeler Company (Fabrication of Steel & Non-Ferrous Metals) New Haven
Industrial Welding Company (Equipment Manufacturers—Steel Fabricators) Hartford

Welding—Lead
Connecticut Welders Inc (tanks & coils) Wallingford
Storts Welding Company (tanks and fabrication) Meriden

Welding Rods
American Brass Company The Waterbury
Bridgeport Brass Company Bridgeport
Bristol Brass Co The (brass & bronze) Bristol

Wells
Church Co The Stephen B Seymour

Wheels—Industrial
George P Clark Co Windsor Locks

Wicks
American Felt Co Glenville
Auburn Manufacturing Company The (felt, asbestos) Middletown
Holyoke Heater Corp of Conn Inc Hartford

Wiffle Ball
Wiffle Ball Inc The New Haven

Window & Door Guards
Hartford Wire Works Co The Hartford
Smith Co The John P New Haven

Window Shades
New England Shade & Blind Co Inc Durham

Wiping Cloths
Federal Textile Corporation New Haven

Wire
American Brass Company The Waterbury
American Steel & Wire Div of U S Steel New Haven
Atlantic Wire Co The (steel) Branford
Bartlett Hair Spring Wire Co The (hair spring) North Haven
Bridgeport Brass Company (brass and silicon bronze) Bridgeport
Bristol Brass Corp The (brass & bronze) Bristol
Driscoll Wire Co The (steel) Shelton
Hudson Wire Co Winsted Div (insulated & enameled magnet) Winsted
Platt Bros & Co The (zinc wire) P O Box 1030 Waterbury
Plume & Atwood Mfg Co The (brass, bronze, nickel silver) Thomaston
Scovill Manufacturing Company (Brass, Bronze and Nickel Silver) Waterbury 91

Wire and Cable
Continental Wire Corp (for industrial and military applications) Wallingford
General Electric Company (for residential, commercial and industrial applications) Bridgeport
Rockbestos Products Corporation (all asbestos, mining, shipboard and appliance applications) New Haven

Wire Arches & Trellises
Hartford Wire Works Co The Hartford
John P Smith Co The 423-33 Chapel St New Haven

Wire Baskets
Wiretex Mfg Inc (Industrial, for acid, heat, treating and degreasing) Bridgeport

Wire Cloth
Hartford Wire Works Co The Hartford
C O Jeliff Mfg Co The (all metal, all meshes) Southport
Pequot Wire Cloth Co Inc Norwalk
Rolock Inc (Alloy) Fairfield
Smith Co The John P New Haven

Wire Dipping Baskets
Hartford Wire Works Co The Hartford
John P Smith Co The 423-33 Chapel St New Haven

Wire Drawing Dies
Waterbury Wire Die Co The Waterbury

Wire Forming Machinery
Torrington Manufacturing Company The Torrington

Wire Formings
Autoyre Co The Oakville
G E Prentice Mfg Co The Kensington
Master Engineering Company West Cheshire
North & Judd Manufacturing Co New Britain
Turner & Seymour Manufacturing Co The Torrington
Verplex Company The Essex

Wire Forms
Barnes Co The Wallace Div Associated Spring Corp Bristol
Bristol Spring Manufacturing Co Plainville
Colonial Spring Corporation The Hartford
Connecticut Spring Corporation The Hartford
Foursome Manufacturing Co Bristol
Gemco Manufacturing Co Inc Southington
Humason Mfg Co The Forestville
New England Spring Mfg Co Unionville
Templeman Co D R Plainville
Terryville Manufacturing Co Terryville

Wire Goods
American Buckle Co The (overall trimmings) West Haven
Patent Button Co The Waterbury
Scovill Manufacturing Company (To Order) Waterbury 91

Wire Partitions
Hartford Wire Works Co The Hartford
John P Smith Co The 423-33 Chapel St New Haven

Wire Products
Humason Mfg Co The Forestville
Plume & Atwood Mfg Co The (to order) Thomaston

Wire Reels
A H Nilson Mach Co The Bridgeport

Wire Rings
American Buckle Co The (pan handles and tinners' trimmings) West Haven
Humason Mfg Co The Forestville
Templeman Co D R Plainville

Wire Rope and Strand
American Steel & Wire Div of U S Steel New Haven

Wire—Specialties
Andrew B Hendryx Co The New Haven

Wiring Devices
Harvey Hubbell Inc Bridgeport

Wiring Harnesses
Sight Light Div The American Machine & Foundry Co Deep River

Wood Scrapers
Fletcher-Terry Co The Forestville

Woodwork
C H Dresser & Sons Inc (Mfg all kinds of woodwork) Hartford
Hartford Builders Finish Co Hartford

Woven Felts—Wool
Chas W House & Sons Inc (Mills & Cutting Plant) Unionville

Yarns
Aldon Spinning Mills Corporation The (fine-wollen and specialty) Talcottville
Ensign-Bickford Co The (jute-carpet) Simsbury
Hartford Spinning Incorporated (Wollen, knitting and weaving yarns) Unionville

Zinc
Platt Bros & Co The (ribbon, strip and wire) P O Box 1030 Waterbury

Zinc Castings
Newton-New Haven Co Inc 688 Third Ave West Haven

(Advt.)

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NEW HAVEN 4, CONN.

Ethics and Principles of Modern Business

(Continued from page 36)

an area in which I hope you younger men will better our record.

In recent years, we have frequently seen industry caving in before the combined pressures of big labor and big government, even though by so doing management was selling out the customer, the shareholder, the pensioner, and the unrepresented employee.

Many companies have an established policy of avoiding, as if the plague, close contact with local, state, or national "politics." Business leaders of past generations may have had their faults, but I think they, with their rugged individualism, showed more courage on vital issues than do many of our present generation of management. Maybe we have become so obsessed with the desirability of making friends that we are unwilling to make any enemies, even of the right kind!

These are times that demand courage and leadership from businessmen. If the corruption which has been exposed is not vigorously attacked on every front, the public will be justified in becoming cynical, and all our cherished American traditions will be jeopardized. Even business cannot long maintain its integrity in a sea of corruption. It is high time we businessmen took more part in this battle, as did the merchants and artisans of Boston when they started the struggle which won our freedom.

Businessmen, educators, and citizens generally, must work together to solve the problem of corruption in American life and to restore the high standards of ethical conduct that have provided the moral background of our nation. Only if all the forces for sound principles and righteousness join together in a supreme effort will we be able to win the vital battle for the restoration of high ethical standards throughout our nation.

Service Section

WANTED: Salesman who is familiar with used machine tools. One to invest time or money on locating and selling. Box No. PA-28.

WANTED: Salesman or retired engineer, familiar with rubber, chemical and plastic (used) machinery field. One to invest money and time, or just time in locating same. Box No. PA-29.

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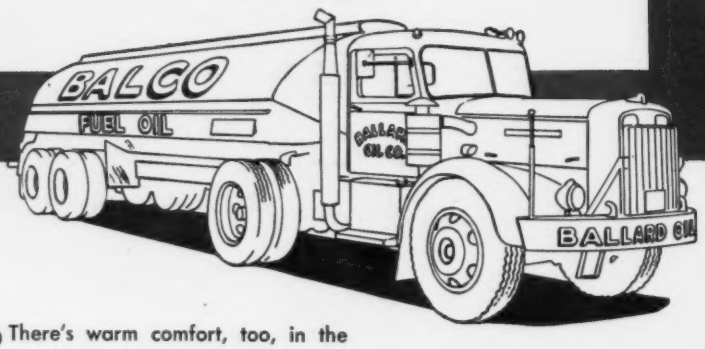


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